LaJuana S. Wilcher Secretary

# **AIR QUALITY PERMIT**

Ernie Fletcher Governor

Issued under 401 KAR 52:030 Federally-enforceable Permits for Nonmajor Sources



Commonwealth of Kentucky
Natural Resources and Environmental Protection Cabinet
Department for Environmental Protection
Division for Air Quality
803 Schenkel Lane
Frankfort, Kentucky 40601
(502) 573-3382

Permittee Name: Huish Detergents, Inc.

Mailing Address: 385 Southwood Court, Bowling Green, KY 42101

is authorized to operate a detergent manufacturing facility.

Source Name: Huish Detergents, Inc.

Mailing Address: 385 Southwood Court, Bowling Green, KY 42101

**Source Location:** Same as above

**KYEIS ID #:** 21-227-00100 SIC Code: 2841 **Log Number:** 53439 County: Warren

AI Number: 4117 Activity #: APE 20040001

Permit Number: F-05-016 Permit Type: Conditional Major Operating

Regional Office: Bowling Green Completion Date: April 18, 2005 1508 Westen Avenue Issuance Date: July 8, 2005

1508 Westen Avenue Issuance Date: July 8, 2005 Bowling Green, KY 42104 Expiration Date: July 8, 2010

> John S. Lyons, Director Division for Air Quality

**DEP7001 (6-97)** *Revised: 07/10/03* 

Huish Detergents Inc Subject Item Inventory

Activity ID No.: APE20040001

# **Subject Item Inventory:**

ID	Designation	Description
AIOO4117	Source	General Requirements
COMB1	001	Emission Point 01 (Boiler #1) Date installed: 11/94 Max fuel usage rate: 109,965,000 ft3/yr
COMB2	002	Max fuel input: 12.55 mmBtu/hr natural gas  Emission Point 02 (Boiler #2)  Date installed: 11/94  Max fuel usage rate: 73,312,800 ft3/yr  Max fuel input: 8.37 mmBtu/hr natural gas
COMB3	003	Emission Point 03 (Boiler #3) Date installed: 6/00 Max fuel usage rate: 109,965,000 ft3/yr
COMB4	004	Max fuel input: 12.553 mmBtu/hr natural gas  Emission Point 04 (Boiler #4)  Date installed: 6/00  Max fuel usage rate: 73,312,800 ft3/yr  Max fuel input: 8.37 mmBtu/hr natural gas
EQPT1	005	Emission Point 05 (BV-36) STPP feeder bin for dish gel (Liquids, bin vent, ADG package line) Date installed: 1/4/98 Controls: Mikropul bin vent 96SF16 Control efficiency: 99.85% Max throughput: 0.08 tons/hour
EQPT2	006	Emission Point 18 (BV-37) Soda ash 100 feeder bin for dish gel (Liquids, bin vent, ADG package line) Date installed: 1/4/98 Controls: Mikropul bin vent 120SF25 Control efficiency: 99.85% Max throughput: 0.11 tons/hour
EQPT3	Insignificant	Emission Point 20 (Mixers #1,#2,#3,#4,#5) Date installed: 4/1994
EQPT4	Insignificant	Emission Point 21 (Premixers #1,#2,#3) Date installed: 4/1994

Huish Detergents Inc Subject Item Inventory

ID	Designation	Description
EQPT5	007	Emission Point 07 (BV-14) Soda ash 100 storage bin (Powders farm, low suds, bin vent) Date installed: 1/1/95 Controls: Mikropul bin vent 25S-10-20 Control efficiency: 99.85% Max throughput: 10 tons/hour
EQPT6	008	Emission Point 08 (BV-15) Soda ash 260 silo storage (Powders farm, high suds, bin vent) Date installed: 1/1/95 Controls: Mikropul bin vent 25S-10-20 Control efficiency: 99.85% Max throughput: 7 tons/hour
EQPT7	009	Emission Point 09 (BV-16) Sodium perborate silo storage (Powders farm, low & high suds, bin vent) Date installed: 1/1/95 Controls: Mikropul bin vent 25S-10-20 Control efficiency: 99.85% Max throughput: 1.5 tons/hour
EQPT8	010	Emission Point 10 (BV-17) Sodium tripolyphosphate silo storage (Powders farm, low & high suds, bin vent) Date installed: 1/1/95 Controls: Mikropul bin vent 25S-10-20 Control efficiency: 99.85% Max throughput: 5.6 tons/hour
EQPT9	011	Emission Point 11 (BV-18)  Zeolite silo storage (Powders farm, low & high suds, bin vent)  Date installed: 1/1/95  Controls: Mikropul bin vent 25S-10-20  Control efficiency: 99.85%  Max throughput: 5 tons/hour

Huish Detergents Inc Subject Item Inventory

ID	Designation	Description
EQPT10	012	Emission Point 12 (BV-19)
		Sodium sulfate silo storage (Powders farm, low & high suds bin vent)
		Date installed: 1/1/95
		Controls: Mikropul bin vent 25S-10-20
		Control efficiency: 99.85%
		Max throughput: 6.9 tons/hour
EQPT11	013	Emission Point 13 (BV-20)
		Salt storage bin (Powders farm, low & high suds, bin vent)
		Date installed: 1/1/95
		Controls: Mikropul bin vent 25S-10-20
		Control efficiency: 99.85%
	1	Max throughput: 11 tons/hour
EQPT12	014	Emission Point 14 (BV-22)
		Sodium tripolyphosphate feeder bin (Crutcher, high suds, bin vent)
		Date installed: 1/1/95
		Controls: Mikropul bin vent 16S-10-20
		Control efficiency: 99.85%
	1	Max throughput: 1.5 tons/hour
EQPT13	015	Emission Point 15 (BV-23)
	1	Soda ash 260 feeder bin (Crutcher, high suds, bin vent)
		Date installed: 1/1/95
		Controls: Mikropul bin vent 16S-10-20
		Control efficiency: 99.85%
	1	Max throughput: 7 tons/hour
EQPT14	016	Emission Point 16 (BV-26)
	1	Sodium sulfate feeder bin (Crutcher, high suds, bin vent)
		Date installed: 1/1/95
		Controls: Mikropul bin vent 16S-10-20
		Control efficiency: 99.85%
		Max throughput: 6.9 tons/hour

Huish Detergents Inc Subject Item Inventory

ID	Designation	Description
EQPT15	017	Emission Point 17 (BV-28) Salt feeder bin (Crutcher, high suds, bin vent) Date installed: 1/1/95
		Controls: Mikropul bin vent 16S-10-20
		Control efficiency: 99.85%
		Max throughput: 3.5 tons/hour
EQPT16	018	Emission Point 18 (BV-35)
		Zeolite feeder bin (Crutcher, high suds, bin vent)
		Date installed: 1/1/95
		Controls: Mikropul bin vent 16S-10-20
		Control efficiency: 99.85%
	1	Max throughput: 1.2 tons/ hour
EQPT17	019	Emission Point 19 (DC-6)
	'	High suds dust collection:
		Sodium silicate feeder tank
		Sulfonic acid feeder tank Caustic feeder tank
		Cage mill feeder
		High suds base feeder bin
		High suds off quality feeder bin
		High suds drum mixer
		Elevator #2 & #7
		Date installed: 1/1/95
		Controls: Mikropul baghouse 221S-10-20
		Control efficiency: 99.85%
	1	Max throughput: 17.7 tons/hour
EQPT18	020	Emission Point 20 (WS-1 & C-1)
	1	Spray tower, Crutcher, Furnace & Cyclone product collector
		25mmBtu/hr furnace uses natural gas with max annual fuel = 219 mmcuft
		Date installed: 1/1/95
		Control equipment: Detergent scrubber and centriscrub-D Control efficiency: 98%
		Max throughput: 17.7 tons/hour
		Max unoughput. 17.7 tons/nou

Huish Detergents Inc Subject Item Inventory

ID	Designation	Description
EQPT19	021	Emission Point 21 (DC-1) Cage mill (Tower, high suds, baghouse) Date installed: 1/1/95 Controls: Mikropul baghouse 320510-25 Control efficiency: 99.85% Max throughput: 17.7 tons/hour
EQPT20	022	Emission Point 22 (BV-29) Perborate feeder bin (Post-add, high suds, bin vent) Date installed: 1/1/95 Controls: Mikropul bin vent 1300-8B Control efficiency: 99.85% Max throughput: 0.05 tons/hour
EQPT21	023	Emission Point 23 (BV-31) STPP feeder bin (Low wash, low suds, bin vent) Date installed: 1/1/95 Controls: Mikropul bin vent 1300-8B Control efficiency: 99.85% Max throughput: 0.5 tons/ hour
EQPT22	024	Emission Point 24 (BV-30) Salt feeder bin (Post-add, low & high suds, bin vent) Date installed: 1/1/95 Controls: Mikropul 16S-10-20 Control efficiency: 99.85% Max throughput: 11 tons/hour

Huish Detergents Inc Subject Item Inventory

ID	Designation	Description
EQPT23	025	Emission Point 25 (DC-7)
	ı	Low suds dust collection:
		Tinopal super sack
		Enzyme super sack
		Screen
		Low suds off quality collection bin
		Low suds fine recycle bin
		Low suds base tank
		Low suds drum mixer
		Elevator #1, #3, #4, #5, #6 & #8
		Date installed: 1/1/95
		Controls: Mikropul baghouse 221S-10-20
		Control efficiency: 99.85%
	1	Max throughput: 20 tons/hour
EQPT24	026	Emission Point 26 (BV-33)
	l	Soda ash 100 feeder bin (Low wash, low suds, bin vent)
		Date installed: 1/1/95
		Controls: Mikropul bin vent 25S-10-20
		Control efficiency: 99.85%
	1	Max throughput: 10 tons/hour
EQPT25	027	Emission Point 27 (DC-2)
	I	Fluid bed dryer (Low wash, low suds baghouse)
		Date installed: 1/1/95
		Controls: Mikropul baghouse 660J10-20
		Control efficiency: 99.85%
	i	Max throughput: 20 tons/hour
EQPT26	028	Emission Point 28 (BV-25)
		Zeolite day tank (Post-add, low & high suds, bin vent)
		Date installed: 1/1/95
		Controls: Mikropul bin vent 16S-10-20
		Control efficiency: 99.85%
		Max throughput: 4.7 tons/ hour

Huish Detergents Inc Subject Item Inventory

ID	Designation	Description
EQPT27	029	Emission Point 29 (DC-3) 7 Packaging Machines (Tower, low & high suds baghouse)
		Date installed: 1/1/95 Controls: Mikropul baghouse 221S-10-20
		Control efficiency: 99.85%
		Max throughput: 37.7 tons/hour
EQPT28	030	Emission Point 30(DC8-DC11)
	I	DC-8: Post-add suds collection (Tower, low suds)
		Date installed: 1/1/95 Controls: Milropyl backeyes 2805, 10, 20
		Controls: Mikropul baghouse 289S-10-20
		DC-9: Perfume/enzyme room dust collection (Post-add, general ventilation)
		Date installed: 1/1/95
		Controls: Mikropul baghouse 49S-10-20
		DC-10 & DC-11: Process fugitive dust collection
		Date installed: 1/1/95
		Controls: Mikropul baghouse 180S-10-20
		Control efficiency for all: 99.85%
	ı	Max throughput for entire emission unit: 1.52 tons/hour
EQPT29	031	Emission Point 31 (DC-12 & DC-13)
	1	Packaging fugitive dust collection (Powders package, general ventilation, baghouse)  Date installed: 1/1/95
		Controls: Mikropul baghouse 180S-10-20
		Control efficiency: 99.85%
		Max throughput: 0.76 tons/hour
EQPT30	Insignificant	Emission Point 53 (Blowmolding)
	1	Date installed: 2/2/1996
EQPT31	032	Emission Point 32 (BV-32)
	•	Perborate feeder bin (Post-add, low suds, bin vent)
		Date installed: 1/1/95 Controls: Mikropul bin vent 16S-10-20
		Control efficiency: 99.85%
		Max throughput: 0.05 tons/hour

Huish Detergents Inc Subject Item Inventory

ID	Designation	Description
EQPT32	033	Emission Point 33 (Liquids area II process MES powder supersack system) Date installed: 4/15/04 Control equipment: Mikropul baghouse 25S-10-40 Control efficiency: 99.85% Max throughput: 3.94 tons/hour Emission Point 34 Powder MES Supersack System (Post-add, low & high suds, bin vent) Date installed: 11/1/01 Controls: Mikropul baghouse 25S-10-40
EQPT34 EQPT35	Insignificant  035	Powder MES Azo Date installed: 11/1/01 Controls: Azo Model S-750  Control efficiency for all: 99.85% Max throughput for entire emission unit: 24 tons/hour Insignificant activities: Injection molding 4 Plastic resin silos Liquid Packaging Area I - 8 Packaging lines 30455gal Sodium Silicate storage tank(Tank 2) 14100gal Acusol 445 storage tank(Tank 21) 14100gal Acusol 445 storage tank(Tank 21) 14100gal Acusol storage tank(Tank 21) 30000gal Methyl Ester Sulfonate storage tank(Tank 201, 211) 30000gal Alcohol Ether Sulfate storage tank(Tank 202) 30000gal Cocamide storage tank(Tank 212) 20000gal Ethyl alcohol storage tank(Tank 290) Mixers & Pre-mixers #6, #7 and MES Emission Point 35 Powders high suds off quality bin vent Date installed: 3/1/05 Control device: Mikropul baghouse 25S-10-20 Control efficiency: 99.85% Max throughput: 0.18 tons/hour

Huish Detergents Inc Subject Item Inventory

Emission Point 03 (Tank 01) 30,455 gal Sulfonic Acid storage tank Date installed: 4/94 Emission Point 05 (Tank 03) 30,455 gal Surfonic Acid storage tank Date installed: 4/94 Emission Point 06 (Tank 04) 20,303 gal Caustic Soda storage tank Date installed: 4/94 Emission Point 08 (Tank 10) 14,099 gal Alcohol Ether Sulfate storage tank Date installed: 4/94 Emission Point 09 (Tank 15) 14,099 gal Glycerine storage tank Date installed: 4/94
30,455 gal Surfonic Acid storage tank Date installed: 4/94 Emission Point 06 (Tank 04) 20,303 gal Caustic Soda storage tank Date installed: 4/94 Emission Point 08 (Tank 10) 14,099 gal Alcohol Ether Sulfate storage tank Date installed: 4/94 Emission Point 09 (Tank 15) 14,099 gal Glycerine storage tank
20,303 gal Caustic Soda storage tank Date installed: 4/94 Emission Point 08 (Tank 10) 14,099 gal Alcohol Ether Sulfate storage tank Date installed: 4/94 Emission Point 09 (Tank 15) 14,099 gal Glycerine storage tank
14,099 gal Alcohol Ether Sulfate storage tank Date installed: 4/94 Emission Point 09 (Tank 15) 14,099 gal Glycerine storage tank
14,099 gal Glycerine storage tank
Date instance. 4/94
Emission Point 11 (Tank 19) 14,099 gal Alcosperce 412 storage tank Date installed: 4/94
Emission Point 12 (Tank 20) 14,099 gal Sulfonic Acid storage tank Date installed: 4/94
Emission Point 13 (Tank 22) 14,099 gal Surfonic Acid storage tank Date installed: 4/94
Emission Point 14 (Tank 24) 14,099 gal Ammonyx Lo storage tank Date installed: 12/94
Emission Point 17 (Tank 37) 14,099 gal Propylene Glycol storage tank Date installed: 12/94

Huish Detergents Inc Subject Item Inventory

Activity ID No.: APE20040001

ID	Designation	Description
STOR11	Insignificant	Tank 38 10,000 gal Sodium Hypochlorite storage tank Date installed: 4/97

# **Subject Item Groups:**

ID	Description	Components
GACT1	All insignificant activities	STOR6 Emission Point 11 (Tank 19)
		14,099 gal Alcosperce 412 storage tank
		Date installed: 4/94
		STOR11 Tank 38
		10,000 gal Sodium Hypochlorite storage tank
		Date installed: 4/97
		EQPT4 Emission Point 21 (Premixers #1,#2,#3)
		Date installed: 4/1994
		STOR1 Emission Point 03 (Tank 01)
		30,455 gal Sulfonic Acid storage tank
		Date installed: 4/94
		STOR2 Emission Point 05 (Tank 03)
		30,455 gal Surfonic Acid storage tank
		Date installed: 4/94
		STOR10 Emission Point 17 (Tank 37)
		14,099 gal Propylene Glycol storage tank
		Date installed: 12/94
		EQPT3 Emission Point 20 (Mixers #1,#2,#3,#4,#5)
		Date installed: 4/1994
		STOR4 Emission Point 08 (Tank 10)
		14,099 gal Alcohol Ether Sulfate storage tank
		Date installed: 4/94
		STOR8 Emission Point 13 (Tank 22)
		14,099 gal Surfonic Acid storage tank
		Date installed: 4/94
		STOR7 Emission Point 12 (Tank 20)
		14,099 gal Sulfonic Acid storage tank
		Date installed: 4/94

Huish Detergents Inc Subject Item Inventory

ID	Description	Components
GACT1	All insignificant activities	STOR9 Emission Point 14 (Tank 24)
	_	14,099 gal Ammonyx Lo storage tank
		Date installed: 12/94
		STOR3 Emission Point 06 (Tank 04)
		20,303 gal Caustic Soda storage tank
		Date installed: 4/94
		EQPT30 Emission Point 53 (Blowmolding)
		Date installed: 2/2/1996
		EQPT34 Insignificant activities:
		Injection molding
		4 Plastic resin silos
		Liquid Packaging Area I - 8 Packaging lines
		30455gal Sodium Silicate storage tank(Tank 2)
		14100gal Acusol 445 storage tank(Tank 21)
		14100gal Accosoft storage tank(Tank 26)
		Two 30000gal Methyl Ester Sulfonate storage tank(Tank 201, 211)
		30000gal Alcohol Ether Sulfate storage tank(Tank 202)
		30000gal Cocamide storage tank(Tank 212)
		20000gal Ethyl alcohol storage tank(Tank 290)
		Mixers & Pre-mixers #6, #7 and MES
		STOR5 Emission Point 09 (Tank 15)
		14,099 gal Glycerine storage tank
		Date installed: 4/94
GACT2	Emission Unit 01& 03 (Boiler #1 & #3)	COMB3 Emission Point 03 (Boiler #3)
		Date installed: 6/00
		Max fuel usage rate: 109,965,000 ft3/yr
		Max fuel input: 12.553 mmBtu/hr natural gas
		COMB1 Emission Point 01 (Boiler #1)
		Date installed: 11/94
		Max fuel usage rate: 109,965,000 ft3/yr
		Max fuel input: 12.55 mmBtu/hr natural gas
GACT3	Emission Unit 02 & 04 (Boiler #2 & #4)	COMB4 Emission Point 04 (Boiler #4)
		Date installed: 6/00
		Max fuel usage rate: 73,312,800 ft3/yr
		Max fuel input: 8.37 mmBtu/hr natural gas

Huish Detergents Inc Subject Item Inventory

ID	Description	Components
GACT3	Emission Unit 02 & 04 (Boiler #2 & #4)	COMB2 Emission Point 02 (Boiler #2)
		Date installed: 11/94
		Max fuel usage rate: 73,312,800 ft3/yr
		Max fuel input: 8.37 mmBtu/hr natural gas
GACT4	Emission Unit 19 (High suds dust collection, DC-6),	EQPT19 Emission Point 21 (DC-1)
	Emission Unit 20 (Spray tower, WS-1)	Cage mill (Tower, high suds, baghouse)
	Emission Unit 21(Cage mill, DC-1)	Date installed: 1/1/95
		Controls: Mikropul baghouse 320510-25
		Control efficiency: 99.85%
		Max througput: 17.7 tons/hour
		EQPT18 Emission Point 20 (WS-1 & C-1)
		Spray tower, Crutcher, Furnace & Cyclone product collector
		25mmBtu/hr furnace uses natural gas with max annual fuel = 219 mmcuft
		Date installed: 1/1/95
		Control equipment: Detergent scrubber and centriscrub-D
		Control efficiency: 98%
		Max throughput: 17.7 tons/hour
		EQPT17 Emission Point 19 (DC-6)
		High suds dust collection:
		Sodium silicate feeder tank
		Sulfonic acid feeder tank
		Caustic feeder tank
		Cage mill feeder
		High suds base feeder bin
		High suds off quality feeder bin
		High suds drum mixer
		Elevator #2 & #7
		Date installed: 1/1/95
		Controls: Mikropul baghouse 221S-10-20
		Control efficiency: 99.85%
		Max throughput: 17.7 tons/hour

Huish Detergents Inc Subject Item Inventory

ID	Description	Components
GACT5	Emission Unit 25 (Low suds dust collection, DC-7)	EQPT25 Emission Point 27 (DC-2)
	Emission Unit 27 (Fluid bed dryer, DC-2)	Fluid bed dryer (Low wash, low suds baghouse)
		Date installed: 1/1/95
		Controls: Mikropul baghouse 660J10-20
		Control efficiency: 99.85%
		Max throughput: 20 tons/hour
		EQPT23 Emission Point 25 (DC-7)
		Low suds dust collection:
		Tinopal super sack
		Enzyme super sack
		Screen
		Low suds off quality collection bin
		Low suds fine recycle bin
		Low suds base tank
		Low suds drum mixer
		Elevator #1, #3, #4, #5, #6 & #8
		Date installed: 1/1/95
		Controls: Mikropul baghouse 221S-10-20
		Control efficiency: 99.85%
		Max throughput: 20 tons/hour
GACT6	Emission Unit 07 (Soda ash 100 storage bin, BV-14)	EQPT24 Emission Point 26 (BV-33)
	Emission Unit 26 (Soda ash 100 feeder bin, BV-33)	Soda ash 100 feeder bin (Low wash, low suds, bin vent)
		Date installed: 1/1/95
		Controls: Mikropul bin vent 25S-10-20
		Control efficiency: 99.85%
		Max throughput: 10 tons/hour
		EQPT5 Emission Point 07 (BV-14)
		Soda ash 100 storage bin (Powders farm, low suds, bin vent)
		Date installed: 1/1/95
		Controls: Mikropul bin vent 25S-10-20
		Control efficiency: 99.85%
		Max throughput: 10 tons/hour

Huish Detergents Inc Subject Item Inventory

ID	Description	Components
GACT7	Emission Unit 08 (Soda ash 260 storage bin, BV-15)	EQPT13 Emission Point 15 (BV-23)
	Emission Unit 15 (Soda ash 260 feeder bin, BV-23)	Soda ash 260 feeder bin (Crutcher, high suds, bin vent)
		Date installed: 1/1/95
		Controls: Mikropul bin vent 16S-10-20
		Control efficiency: 99.85%
		Max throughput: 7 tons/hour
		EQPT6 Emission Point 08 (BV-15)
		Soda ash 260 silo storage (Powders farm, high suds, bin vent)
		Date installed: 1/1/95
		Controls: Mikropul bin vent 25S-10-20
		Control efficiency: 99.85%
		Max throughput: 7 tons/hour
GACT8	Emission Unit 09 (Sodium perborate storage bin, BV-16)	EQPT14 Emission Point 16 (BV-26)
		Sodium sulfate feeder bin (Crutcher, high suds, bin vent)
	Unit 16 (Sodium sulfate feeder bin, BV-26)	Date installed: 1/1/95
		Controls: Mikropul bin vent 16S-10-20
		Control efficiency: 99.85%
		Max throughput: 6.9 tons/hour
		EQPT12 Emission Point 14 (BV-22)
		Sodium tripolyphosphate feeder bin (Crutcher, high suds, bin vent)
		Date installed: 1/1/95
		Controls: Mikropul bin vent 16S-10-20
		Control efficiency: 99.85%
		Max throughput: 1.5 tons/hour
		EQPT7 Emission Point 09 (BV-16)
		Sodium perborate silo storage (Powders farm, low & high suds, bin vent)
		Date installed: 1/1/95
		Controls: Mikropul bin vent 25S-10-20
		Control efficiency: 99.85%
		Max throughput: 1.5 tons/hour

Huish Detergents Inc Subject Item Inventory

ID	Description	Components
GACT9	Emission Unit 05 (STPP feeder bin for dish gel, BV-36) Emission Unit 06 (Soda ash 100 for dish gel, BV-37) Emission Unit 22 (High suds sodium perborate feeder bin, BV-29) Emission Unit 23 (STPP feeder bin, BV-31) Emission Unit 32 (Low suds sodium perborate feeder bin, BV-32) Emission Unit 35 (Powders high suds off quality bin ven	EQPT35 Emission Point 35 Powders high suds off quality bin vent Date installed: 3/1/05 Control device: Mikropul baghouse 25S-10-20 Control efficiency: 99.85% Max throughput: 0.18 tons/hour
		EQPT31 Emission Point 32 (BV-32) Perborate feeder bin (Post-add, low suds, bin vent) Date installed: 1/1/95 Controls: Mikropul bin vent 16S-10-20 Control efficiency: 99.85% Max throughput: 0.05 tons/hour
		EQPT21 Emission Point 23 (BV-31) STPP feeder bin (Low wash, low suds, bin vent) Date installed: 1/1/95 Controls: Mikropul bin vent 1300-8B Control efficiency: 99.85% Max throughput: 0.5 tons/ hour
		EQPT20 Emission Point 22 (BV-29) Perborate feeder bin (Post-add, high suds, bin vent) Date installed: 1/1/95 Controls: Mikropul bin vent 1300-8B Control efficiency: 99.85% Max throughput: 0.05 tons/hour

Huish Detergents Inc Subject Item Inventory

ID	Description	Components
GACT9	Emission Unit 05 (STPP feeder bin for dish gel, BV-36)	EQPT2 Emission Point 18 (BV-37)
	Emission Unit 06 (Soda ash 100 for dish gel, BV-37)	Soda ash 100 feeder bin for dish gel (Liquids, bin vent, ADG package line)
	Emission Unit 22 (High suds sodium perborate feeder	Date installed: 1/4/98
	bin, BV-29)	Controls: Mikropul bin vent 120SF25
	Emission Unit 23 (STPP feeder bin, BV-31)	Control efficiency: 99.85%
	Emission Unit 32 (Low suds sodium perborate feeder	Max throughput: 0.11 tons/hour
	bin, BV-32)	
	Emission Unit 35 (Powders high suds off quality bin ven	t
		EQPT1 Emission Point 05 (BV-36)
		STPP feeder bin for dish gel (Liquids, bin vent, ADG package line)
		Date installed: 1/4/98
		Controls: Mikropul bin vent 96SF16
		Control efficiency: 99.85%
		Max throughput: 0.08 tons/hour

KEY	
ACTV = Activity	AIOO = Agency Interest
AREA = Area	COMB = Combustion
EQPT = Equipment	MNPT = Monitoring Point
PERS = Personnel	PORT = Transport
STOR = Storage	STRC = Structure

Huish Detergents Inc Subject Item Inventory

Activity ID No.: APE20040001

KEY	

TRMT = Treatment

Huish Detergents Inc Facility Requirements

Activity ID No.: APE20040001

#### **AIOO4117 (Source) General Requirements:**

#### Limitation Requirements:

Condition		
No.	Parameter	Condition
L-1 PM10 (Particulate Matter - 10 Microns Or Less) <= 90 tons/y Microns Or Less) The plant wide emissions of PM10 (Particulate Matter - 10 Microns Or Less) <= 90 tons/y period from all non-fugitive sources.		The plant wide emissions of PM10 (Particulate Matter - 10 Microns Or Less) <= 90 tons/yr per consecutive twelve (12) month period from all non-fugitive sources.
		Compliance Demonstration Method:
		In addition to any operational or emission limitations on specific emission units (refer to individual limitations), the permittee shall maintain records of plant wide PM10 monthly emissions from all non-fugitive sources, and summarize them on a 12-month rolling average. [401 KAR 52:030]

## Submittal/Action Requirements:

Condition No.	Condition		
S-1	SEMIANNUAL REPORTS:		

The permittee shall submit report(s): Due semiannually, by the 30th of January and July to the Regional Office listed on the front of this permit, for the duration of this permit, unless otherwise stated. This report shall be a summary of any monitoring required by this permit, other than continuous emission or opacity monitors. For emission units that were still under construction or which had not commenced operation at the end of the 6-month period covered by the report and are subject to monitoring requirements in this permit, the report shall indicate that no monitoring was performed during the previous six months because the emission unit was not in operation. All deviations from permit requirements shall be clearly identified in the reports. [Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources, Section 1b (V)1] All reports shall be certified by a responsible official. [401 KAR 52:030, Section 22] Data from the continuous emission and opacity monitors shall be reported to the Technical Services Branch in accordance with the requirements of 401 KAR 59:005, Section 3(3). [401 KAR 52:030 Section 26, 401 KAR 52:030 Section 22, 401 KAR 59:005 Section 3(3)]

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Huish Detergents Inc Facility Requirements

Activity ID No.: APE20040001

Submittal/Action Requirements:

Condition No.	Condition
S-2	EMISSION EXCEEDANCES:
	The owner or operator shall submit report(s): Due within thirty (30) days of emission related exceedances from permit requirements, including those attributed to upset conditions (other than emission exceedances covered by Requirement D.5); to the Regional Office listed on the front of this permit. Other deviations from permit requirements shall be included in the semiannual reports required by Condition No S-1. [Cabinet Provisions and Procedures for Issuing

#### S-3 COMPLIANCE CERTIFICATION:

The permittee shall certify compliance with the terms and conditions contained in this permit and shall submit compliance certification: Due annually, by the 30th of January to the Regional Office listed on the front of this permit. Compliance Certification Form (DEP 7007CC) (or an approved alternative) shall be used in accordance with the following requirements:

- a. Identification of each term or condition of the permit that is the basis of the certification;
- b. The compliance status regarding each term or condition of the permit;
- c. Whether compliance was continuous or intermittent; and
- d. The method used for determining the compliance status for the source, currently and over the reporting period.

Federally-Enforceable Permits for Non-Major Sources, Section 1b (V)(3) and (4)]. [401 KAR 52:030 Section 26]

- e. For an emissions unit that was still under construction or which has not commenced operation at the end of the year covered by the annual compliance certification, the permittee shall indicate that the unit is under construction and that compliance with any applicable requirements will be demonstrated within the timeframes specified in the permit.
- f. The certification shall be postmarked by January 30th of each year. Annual compliance certifications should be mailed to the Regional Office listed on the front of this permit and the following address:

Division for Air Quality Central Files 803 Schenkel Lane Frankfort, KY 40601. [401 KAR 52:030 Section 21] Page 2 of 54

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# Submittal/Action Requirements:

Condition No.	Condition
S-4	PERFORMANCE TEST NOTICE AND REPORT:
	Pursuant to Section VII 2.(1) of the policy manual of the Division for Air Quality as referenced by 401 KAR 50:016, Section 1.(1), at least one month prior to the date of any required performance test(s), the permittee shall complete and return a Compliance Test Protocol (Form DEP 6027) to the Division's Frankfort Central Office. Pursuant to 401 KAR 50:045, Section 5, the Division shall be notified of the actual test date at least ten (10) days prior to the test.
	For any performance test(s) required by this permit, the permittee shall submit performance/emission test results: Due within 45 days of the completion of the fieldwork to the Division [Policy Manual of the Division of Air Quality, Section VII.3]. [401 KAR 50:016 Section 1(1)]
S-5	PERMIT EXPIRATION AND REAPPLICATION REQUIREMENTS:
	This permit shall remain in effect for a fixed term of five (5) years following the original date of issue. Permit expiration shall terminate the source's right to operate. The permittee shall submit permit application for renewal: Due at least 180 days prior to permit expiration to the Division. Upon a timely and complete submittal, the authorization to operate within the terms and conditions of this permit, including any permit shield, shall remain in effect beyond the expiration date, until the renewal permit is issued or denied by the Division. [401 KAR 52:030 Section 12]

# Narrative Requirements:

Condition No.	Condition	
T-1	SECTION A.	PERMIT AUTHORIZATION. [401 KAR 52:030]

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Huish Detergents Inc Facility Requirements

Activity ID No.: APE20040001

Narrative Requirements:

Condition	
No.	Condition
T-2	A1. Pursuant to a duly submitted application, the Kentucky Division for Air Quality hereby authorizes the operation of the equipment described herein in accordance with the terms and conditions of this permit. This permit has been issued under the provisions of Kentucky Revised Statutes Chapter 224 and regulations promulgated pursuant thereto.
	The permittee shall not construct, reconstruct, or modify any affected facilities without first having submitted a complete application and receiving a permit for the planned activity from the permitting authority, except as provided in this permit or in 401 KAR 52:030, Federally-enforceable permits for non-major sources.
	Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits, licenses, or approvals required by this Cabinet or any other federal, state, or local agency. [401 KAR 52:030]
T-3	SECTION B. SOURCE EMISSION LIMITATIONS AND TESTING REQUIREMENTS. [401 KAR 52:030]
T-4	B1. Compliance with annual emissions and processing limitations contained in this permit, shall be based on emissions and processing rates for any twelve (12) consecutive months. [Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources, Section 1b] [401 KAR 52:030 Section 26]
T-5	B2. Sulfur dioxide, particulate matter and PM-10 emissions, as measured by methods referenced in 401 KAR 50:015 Section 1, shall not exceed the respective limitations specified herein. [401 KAR Chapter 52]
T-6	SECTION C. SOURCE CONTROL EQUIPMENT REQUIREMENTS. [401 KAR 50:055]
T-7	C1. At all times, including periods of startup, shutdown and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Division which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. [401 KAR 50:055 Section 2(5)]
T-8	SECTION D. MONITORING, RECORD KEEPING, AND REPORTING REQUIREMENTS. [401 KAR 52:030]

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Huish Detergents Inc Facility Requirements

Activity ID No.: APE20040001

Narrative Requirements:

Condition	
No.	Condition
T-9	D.1. When continuing compliance is demonstrated by periodic testing or instrumental monitoring, the permittee shall compile records of required monitoring information that include:  a. Date, place (as defined in this permit), and time of sampling or measurements;  b. Analyses performance dates;  c. Company or entity that performed analyses;  d. Analytical techniques or methods used;  e. Analyses results; and  f. Operating conditions during time of sampling or measurement.  [Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources, Section 1b (IV)(1)] [401 KAR 52:030 Section 26]
T-10	D.2. Records of all required monitoring data, support information (including calibrations, maintenance records, and original strip chart recordings), and reports required by the Division for Air Quality shall be retained by the permittee for a period of five years. These records shall be made available for inspection upon request by any duly authorized representative of the Division for Air Quality. [Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources, Section 1b (IV)(2) and Section 1a (7)] [401 KAR 52:030 Section 26]
T-11	<ul> <li>D.3. The permittee shall allow authorized representatives of the Cabinet to perform the following during reasonable times:</li> <li>a. To access and copy any records required by the permit;</li> <li>b. To inspect any facility, equipment (including monitoring and air pollution control equipment), practice, or operation; and</li> <li>c. To sample or monitor substances or parameters to assure compliance with the permit or any applicable requirements.</li> <li>Reasonable times are defined as during all hours of operation, during normal office hours, or during an emergency. [401 KAR 52:030 Section 3(1)(f)]</li> </ul>
T-12	D.4. No person shall obstruct, hamper, or interfere with any Cabinet employee or authorized representative while in the process of carrying out official duties. Refusal of entry or access may constitute grounds for permit revocation and assessment of civil penalties. [KRS 77.165, 401 KAR 50:060]
T-13	D.5. The owner or operator shall notify the Regional Office listed on the front of this permit concerning startups, shutdowns, or malfunctions as follows: i) When emissions during any planned shutdowns and ensuing startups will exceed the standards, notification shall be made no later than three (3) days before the planned shutdown, or immediately following the decision to shut down, if the shutdown is due to events which could not have been foreseen three (3) days before the shutdown. ii) When emissions due to malfunctions, unplanned shutdowns and ensuing startups are or may be in excess of the standards the permittee shall notify the division as promptly as possible by telephone (or other electronic media) and shall submit written notice upon request. [401 KAR 50:055 Section 1]
T-14	D.6. The permittee shall provide the Division with all information necessary to determine its subject emissions within thirty (30) days of the date the KEIS emission report is mailed to the permittee. If a KEIS emission report is not mailed to the permittee, comply with all other emission reporting requirements in this permit. [401 KAR 52:030 Section 3(1)(d)]

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Huish Detergents Inc Facility Requirements

Activity ID No.: APE20040001

Narrative Requirements:

Condition No.	Condition	
T-15	D.7. The Cabinet may authorize the temporary use of an emission unit to replace a similar unit that is taken off-line for maintenance, if the following conditions are met:  a. The owner or operator shall submit to the Cabinet, at least ten (10) days in advance of replacing a unit, the appropriate Forms DEP7007AI to DD that show:  i. The size and location of both the original and replacement units; and  ii. Any resulting change in emissions;  b. The PTE of the replacement unit shall not exceed that of the original unit by more than twenty-five (25) percent of a major source threshold, and the emissions from the unit shall not cause the source to exceed the emissions allowable under the permit;  c. The PTE of the replacement unit or the resulting PTE of the source shall not subject the source to a new applicable requirement;  d. The replacement unit shall comply with all applicable requirements; and  e. The source shall notify Regional office of all shutdowns and start-ups.  f. Within six (6) months after installing the replacement unit, the owner or operator shall  i. Re-install the original unit and remove or dismantle the replacement unit; or  ii. Submit an application to permit the replacement unit as a permanent change. [401 KAR 52:030 Section 20]	
T-16	SECTION E. GENERAL PROVISIONS. [401 KAR 52:030]	
T-17	E(a) General Compliance Requirements. [401 KAR 52:030]	
T-18	E(a)1. The permittee shall comply with all conditions of this permit. A noncompliance shall be a violation of 401 KAR 52:030 Section 3(1)(b) and is also a violation of Federal Statute 42 USC 7401 through 7671q (the Clean Air Act). Noncompliance with this permit is grounds for enforcement action including but not limited to the termination, revocation and reissuance, revision, or denial of a permit. [Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources, Section 1a (2)] [401 KAR 52:030 Section 26]	
T-19	E(a)2. Notification by the permittee of a planned change or anticipated noncompliance, or filing of a request for any permit revision, revocation, reissuance, or termination shall not stay any permit condition. [Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources, Section 1a (5)] [401 KAR 52:030 Section 26]	

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Huish Detergents Inc Facility Requirements

Activity ID No.: APE20040001

Narrative Requirements:

Condition No.	Condition	
T-20	E(a)3. This permit may be revised, revoked, reopened and reissued, or terminated for cause in accordance with 401 KAR 52:030 Section 18. The permit will be reopened for cause and revised accordingly under the following circumstances:  a. If additional applicable requirements become applicable to the source and the remaining permit term is three (3) years or longer. In this case, the reopening shall be completed no later than eighteen (18) months after promulgation of the applicable requirement. A reopening shall not be required if compliance with the applicable requirement is not required until after the date on which the permit is due to expire, unless this permit or any of its terms and conditions have been extended pursuant to 401 KAR 52:030 Section 12;  b. The Cabinet or the U. S. EPA determines that the permit must be revised or revoked to assure compliance with the applicable requirements;  c. The Cabinet or the U. S. EPA determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.  Proceedings to reopen and reissue a permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of the permit for which cause to reopen exists. Reopenings shall be made as expeditiously as practicable. Reopenings shall not be initiated before a notice of intent to reopen is provided to the source by the Division, at least thirty (30) days in advance of the date the permit is to be reopened, except that the Division may provide a shorter time period in the case of an emergency. [Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources, Section 1a (4)] [4 KAR 52:030 Section 26] [401 KAR 50:060 Section 2 [401 KAR 52:030 Section 2 [401 KAR 52:030 Section 2 [401 KAR 50:060	
T-21	E(a)4. The permittee shall furnish upon request information requested by the Division to determine compliance with the permit or to determine if cause exists for modifying, revoking and reissuing, or terminating the permit. [Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources, Sections 1a (6) and (7)] [401 KAR 52:030 Section 26]	
T-22	E(a)5. The permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information to the permitting authority. [401 KAR 52:030 Section 7(1)]	
T-23	E(a)6. Any condition or portion of this permit which becomes suspended or is ruled invalid as a result of any legal or other action shall not invalidate any other portion or condition of this permit. [Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources, Section 1a (11)] [401 KAR 52:030 Section 26]	
T-24	E(a)7. The permittee shall not use as a defense in an enforcement action the contention that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance. [Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources, Section 1a (3)] [401 KAR 52:030 Section 26]	
T-25	E(a)8. Except for requirements identified as state-origin requirements in this permit, all terms and conditions contained herein shall be enforceable by the United States Environmental Protection Agency and citizens of the United States. [Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non Major Sources, Section 1a (12)(b)] [401 KAR 52:030 Section 26]	

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Activity ID No.: APE20040001

# Narrative Requirements:

Condition			
No.	Condition		
T-26	E(a)9. This permit shall be subject to suspension if the permittee fails to pay all emissions fees within 90 days after the date of notice as specified in 401 KAR 50:038 Section 3(6). [Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources, Section 1a (9)] [401 KAR 52:030 Section 26]		
T-27	E(a)10. Nothing in this permit shall alter or affect the liability of the permittee for any violation of applicable requirements prior to or at the time of permit issuance. [401 KAR 52:030 Section 11(3)]		
T-28	E(a)11. This permit does not convey property rights or exclusive privileges. [Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources, Section 1a (8)] [401 KAR 52:030 Section 26]		
T-29	E(a)12. Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits, licenses, or approvals required by the Kentucky Cabinet for Environmental and Public Protection or any other federal, state, or local agency. [401 KAR 52:030]		
T-30	E(a)13. Nothing in this permit shall alter or affect the authority of U.S. EPA to obtain information pursuant to Federal Statute 42 USC 7414, Inspections, monitoring, and entry. [401 KAR Chapter 52]		
T-31	E(a)14. Nothing in this permit shall alter or affect the authority of U.S. EPA to impose emergency orders pursuant to Federal Statute 42 USC 7603, Emergency orders. [401 KAR Chapter 52]		
T-32	E(a)15. Permit Shield – A permit shield shall not protect the owner or operator from enforcement actions for violating an applicable requirement prior to or at the time of permit issuance. Compliance with the conditions of this permit shall be considered compliance with:  (a) Applicable requirements that are included and specifically identified in this permit; and  (b) Non-applicable requirements expressly identified in this permit. [401 KAR 52:030 Section 11]		
T-33	E(a)16. Emission units described in this permit shall demonstrate compliance with applicable requirements if requested by the Division. [401 KAR 52:030 Section 3(1)(c)]		
T-34	E(a)17. The authority to operate granted through this permit shall cease to apply if the source fails to submit additional information requested by the Division after the completeness determination has been made on any application, by whatever deadline the Division sets. [401 KAR 52:030 Section 8(2)]		
T-35	E(a)18. This permit consolidates the authority of any previously issued PSD, NSR, or Synthetic minor source preconstruction permit terms and conditions for various emission units and incorporates all requirements of those existing permits into one single permit for this source. [401 KAR Chapter 51]		
T-36	E(b) Permit Revisions. [401 KAR 52:030]		

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Narrative Requirements:

Condition No.	Condition	
T-37	E(b)1. Minor permit revision procedures specified in 401 KAR 52:030 Section 14 (3) may be used for permit revisions involving the use of economic incentive, marketable permit, emission trading, and other similar approaches, to the extent that these minor permit revision procedures are explicitly provided for in the SIP or in applicable requirements and meet the relevant requirements of 401 KAR 52:030 Section 14 (2). [401 KAR 52:030 Section 14(2)]	
T-38	E(b)2. This permit is not transferable by the permittee. Future owners and operators shall obtain a new permit from the Division for Air Quality. The new permit may be processed as an administrative amendment if no other change in this permit is necessary, and provided that a written agreement containing a specific date for transfer of permit responsibility coverage and liability between the current and new permittee has been submitted to the permitting authority within ten (10) days following the transfer. [401 KAR 52:030]	
T-39	E(e) Emergency Provisions. [401 KAR 52:030]	
T-40	E(e)1. An emergency shall constitute an affirmative defense to an action brought for noncompliance with the technology-based emission limitations if the permittee demonstrates through properly signed contemporaneous operating logs or other relevant evidence that:  a. An emergency occurred and the permittee can identify the cause of the emergency;  b. The permitted facility was at the time being properly operated;  c. During an emergency, the permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards or other requirements in the permit; and,  d. The permittee notified the Division as promptly as possible and submitted written notice of the emergency to the Division within two (2) working days of the time when emission limitations were exceeded due to the emergency. The notice shall include a description of the emergency, steps taken to mitigate emissions, and the corrective actions taken. [401 KAR 52:030 Section 23(1)]	
T-41	E(e)2. Notification of the Division does not relieve the source of any other local, state or federal notification requirements. [401 KAR 52:030]	
T-42	E(e)3. Emergency conditions listed in General Provision E(e)1 above are in addition to any emergency or upset provision(s) contained in an applicable requirement. [401 KAR Chapter 52 Section 23(3)]	
T-43	E(e)4. In an enforcement proceeding, the permittee seeking to establish the occurrence of an emergency shall have the burden of proof. [401 KAR 52:030 Section 23(2)]	
T-44	E(f) Risk Management Provisions. [401 KAR Chapter 68]	

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Activity ID No.: APE20040001

Narrative Requirements:

Condition No.	Condition
T-45	E(f)1. The permittee shall comply with all applicable requirements of 401 KAR Chapter 68, Chemical Accident Prevention, which incorporates by reference 40 CFR Part 68, Risk Management Plan provisions. If required, the permittee shall comply with the Risk Management Program and submit a Risk Management Plan to
	RMP Reporting Center P.O. Box 1515 Lanham-Seabrook, MD, 20703-1515. [401 KAR Chapter 68]
T-46	E(f)2. If requested, submit additional relevant information by the Division or the U.S. EPA. [401 KAR Chapter 68]
T-47	E(g) Ozone depleting substances. [40 CFR 82]
T-48	E(g)1. The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR 82, Subpart F, except as provided for Motor Vehicle Air Conditioners (MVACs) in Subpart B:  a. Persons opening appliances for maintenance, service, repair, or disposal shall comply with the required practices contained in 40 CFR 82.156.  b. Equipment used during the maintenance, service, repair, or disposal of appliances shall comply with the standards for recycling and recovery equipment contained in 40 CFR 82.158.  c. Persons performing maintenance, service, repair, or disposal of appliances shall be certified by an approved technician certification program pursuant to 40 CFR 82.161.  d. Persons disposing of small appliances, MVACs, and MVAC-like appliances (as defined at 40 CFR 82.152) shall comply with the recordkeeping requirements pursuant to 40 CFR 82.166.  e. Persons owning commercial or industrial process refrigeration equipment shall comply with the leak repair requirements pursuant to 40 CFR 82.156.  f. Owners/operators of appliances normally containing 50 or more pounds of refrigerant shall keep records of refrigerant purchased and added to such appliances pursuant to 40 CFR 82.166. [40 CFR 82]
T-49	E(g)2. If the permittee performs service on motor (fleet) vehicle air conditioners containing ozone-depleting substances, the source shall comply with all applicable requirements as specified in 40 CFR 82, Subpart B, Servicing of Motor Vehicle Air Conditioners. [40 CFR 82]

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#### EQPT8 (010) Emission Point 10 (BV-17) Sodium tripolyphosphate silo storage (Powders farm, low & high suds, bin vent)

# Limitation Requirements:

Condition	1	
No.	Parameter	Condition
L-1	PT (Particulate Matter)	Each unit shall have a maximum emissions of PT (Particulate Matter) $\leq$ 10.45 lbs/hr. If the process weight rate for the unit is 1,000 lbs/hr or less, the limit on emissions of particulate matter is 2.34 lb/hr. If the process weight rate for the unit is above 1,000 lbs/hr, the limit on emissions of particulate matter from the unit can be determined (in lbs/hr) by taking the process weight rate for materials introduced into the unit (in tons/hr), raising the process weight rate value to the 0.62 power, and multiplying by 3.59 (maximum = 3.59 x process weight rate^0.62).
		Compliance Demonstration:
		Compliance will be demonstrated from the following emission calculation basis, processing rate limitation and monitoring requirements:
		PT emission in pounds per hour = (monthly processing rate in tons/month)(1 month/hours of operation that month)(emission factor of 2.62lb PT/ton)(1-control efficiency of 0.9985).
		The processing rate of this equipment shall not exceed 5.6 tons/hour with control device in use at all times of operation.
		See Monitoring Requirements for monitoring rates and visual inspection of controls. [401 KAR 59:010 Section 3(2)] Statistical basis: Three-hour average.
L-2	Visible Emissions	Each unit shall have Visible Emissions < 20 % opacity
		Compliance Demonstration:
		Refer to Recordkeeping (T-2) and Monitoring (T-5) requirements for this unit.
		Limitation. [401 KAR 59:010 Section 3(1)] Statistical basis: Six-minute average.

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## Narrative Requirements:

#### **Applicable Regulations:**

Condition No.	Condition	
T-1	Applicable Regulations: New process operations is applicable to each affected facility associated with a process operation commenced after July 2, 1975 and limits particulate emissions. [401 KAR 59:010]	
Record	Recordkeeping:	
Condition No.	Condition	

Recordkeeping: The permitee shall maintain records of the following: 1) monthly hours of operation and material processing rate; 2) the daily log of pressure drop

readings of incoming and outgoing air for the dust collectors; 3) the monthly log of qualitative visual observation of opacity of emissions and the opacity determined by Reference Method 9, if any were taken, and repairs that were made due to any opacity reading which exceeded the standard. [401 KAR Chapter 52 Section 10]

## Monitoring:

T-2

Condition No.	Condition
T-3	Monitoring: The permittee shall monitor the amount of material processed on a monthly basis. [401 KAR Chapter 52 Section 10]
T-4	Monitoring: The permittee shall monitor the hours of operation of the unit on a monthly basis. [401 KAR Chapter 52 Section 10]
T-5	Monitoring: The permittee shall perform a qualitative visible observation of the opacity of emissions from each stack on a monthly basis and maintain a log of the observation. If visible emission from a stack are seen, then the opacity shall be determined by EPA Reference Method 9 and an inspection shall be initiated for any necessary repairs. [401 KAR Chapter 52 Section 10]
T-6	Monitoring: The permitee shall monitor the pressure drop of incoming and outgoing air for the dust collectors on a daily basis. [401 KAR Chapter 52 Section 10]

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## EQPT9 (011) Emission Point 11 (BV-18) Zeolite silo storage (Powders farm, low & high suds, bin vent)

# Limitation Requirements:

Condition		
No.	Parameter	Condition
L-1	PT (Particulate Matter)	Each unit shall have a maximum emissions of PT (Particulate Matter) <= 9.74 lbs/hr. If the process weight rate for the unit is 1,000 lbs/hr or less, the limit on emissions of particulate matter is 2.34 lb/hr. If the process weight rate for the unit is above 1,000 lbs/hr, the limit on emissions of particulate matter from the unit can be determined (in lbs/hr) by taking the process weight rate for materials introduced into the unit (in tons/hr), raising the process weight rate value to the 0.62 power, and multiplying by 3.59 (maximum = 3.59 x process weight rate^0.62).
		Compliance Demonstration:
		Compliance will be demonstrated from the following emission calculation basis, processing rate limitation and monitoring requirements:
		PT emission in pounds per hour = (monthly processing rate in tons/month)(1 month/hours of operation that month)(emission factor of 4.8lb PT/ton)(1-control efficiency of 0.9985).
		The processing rate of this equipment shall not exceed 5 tons/hour with control device in use at all times of operation.
		See Monitoring Requirements for monitoring rates and visual inspection of controls. [401 KAR 59:010 Section 3(2)] Statistical basis: Three-hour average.
L-2	Visible Emissions	Each unit shall have Visible Emissions < 20 % opacity
		Compliance Demonstration:
		Refer to Recordkeeping (T-2) and Monitoring (T-5) requirements for this unit.
		Limitation. [401 KAR 59:010 Section 3(1)] Statistical basis: Six-minute average.

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## Narrative Requirements:

#### **Applicable Regulations:**

Condition No.	Condition		
T-1	Applicable Regulations: New process operations is applicable to each affected facility associated with a process operation commenced after July 2, 1975 and limits particulate emissions. [401 KAR 59:010]		
Recor	dkeeping:		
Condition No.	Condition		

Recordkeeping: The permitee shall maintain records of the following: 1) monthly hours of operation and material processing rate; 2) the daily log of pressure drop readings of incoming and outgoing air for the dust collectors; 3) the monthly log of qualitative visual observation of opacity of emissions and the opacity determined by Reference Method 9, if any were taken, and repairs that were made due to any opacity reading which exceeded the standard. [401 KAR Chapter 52 Section 10]

#### **Monitoring:**

T-2

Condition No.	Condition
T-3	Monitoring: The permittee shall monitor the amount of material processed on a monthly basis. [401 KAR Chapter 52 Section 10]
T-4	Monitoring: The permittee shall monitor the hours of operation of the unit on a monthly basis. [401 KAR Chapter 52 Section 10]
T-5	Monitoring: The permittee shall perform a qualitative visible observation of the opacity of emissions from each stack on a monthly basis and maintain a log of the observation. If visible emission from a stack are seen, then the opacity shall be determined by EPA Reference Method 9 and an inspection shall be initiated for any necessary repairs. [401 KAR Chapter 52 Section 10]
T-6	Monitoring: The permitee shall monitor the pressure drop of incoming and outgoing air for the dust collectors on a daily basis. [401 KAR Chapter 52 Section 10]

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## EQPT10 (012) Emission Point 12 (BV-19) Sodium sulfate silo storage (Powders farm, low & high suds bin vent)

# Limitation Requirements:

Condition		
No.	Parameter	Condition
L-1	PT (Particulate Matter)	Each unit shall have a maximum emissions of PT (Particulate Matter) <= 11.89 lbs/hr. If the process weight rate for the unit is 1,000 lbs/hr or less, the limit on emissions of particulate matter is 2.34 lb/hr. If the process weight rate for the unit is above 1,000 lbs/hr, the limit on emissions of particulate matter from the unit can be determined (in lbs/hr) by taking the process weight rate for materials introduced into the unit (in tons/hr), raising the process weight rate value to the 0.62 power, and multiplying by 3.59 (maximum = 3.59 x process weight rate^0.62).
		Compliance Demonstration:
		Compliance will be demonstrated from the following emission calculation basis, processing rate limitation and monitoring requirements:
		PT emission in pounds per hour = (monthly processing rate in tons/month)(1 month/hours of operation that month)(emission factor of 3.48lb PT/ton)(1-control efficiency of 0.9985).
		The processing rate of this equipment shall not exceed 6.9 tons/hour with control devices in use at all times of operation.
		See Monitoring Requirements for monitoring rates and visual inspection of controls. [401 KAR 59:010 Section 3(2)] Statistical basis: Three-hour average.
L-2	Visible Emissions	Each unit shall have Visible Emissions < 20 % opacity
		Compliance Demonstration:
		Refer to Recordkeeping (T-2) and Monitoring (T-5) requirements for this unit.
		Limitation. [401 KAR 59:010 Section 3(1)] Statistical basis: Six-minute average.

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### Narrative Requirements:

#### **Applicable Regulations:**

Condition No.	Condition
T-1	Applicable Regulations: New process operations is applicable to each affected facility associated with a process operation commenced after July 2, 1975 and limits particulate emissions. [401 KAR 59:010]
Recordkeeping:	
Condition	Condition

# Condition

Recordkeeping: The permitee shall maintain records of the following: 1) monthly hours of operation and material processing rate; 2) the daily log of pressure drop readings of incoming and outgoing air for the dust collectors; 3) the monthly log of qualitative visual observation of opacity of emissions and the opacity determined by Reference Method 9, if any were taken, and repairs that were made due to any opacity reading which exceeded the standard. [401 KAR Chapter 52 Section 10]

#### **Monitoring:**

T-2

Condition No.	Condition
T-3	Monitoring: The permittee shall monitor the amount of material processed on a monthly basis. [401 KAR Chapter 52 Section 10]
T-4	Monitoring: The permittee shall monitor the hours of operation of the unit on a monthly basis. [401 KAR Chapter 52 Section 10]
T-5	Monitoring: The permittee shall perform a qualitative visible observation of the opacity of emissions from each stack on a monthly basis and maintain a log of the observation. If visible emission from a stack are seen, then the opacity shall be determined by EPA Reference Method 9 and an inspection shall be initiated for any necessary repairs. [401 KAR Chapter 52 Section 10]
T-6	Monitoring: The permitee shall monitor the pressure drop of incoming and outgoing air for the dust collectors on a daily basis. [401 KAR Chapter 52 Section 10]

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## EQPT11 (013) Emission Point 13 (BV-20) Salt storage bin (Powders farm, low & high suds, bin vent)

# Limitation Requirements:

Condition		
No.	Parameter	Condition
L-1	PT (Particulate Matter)	Each unit shall have a maximum emissions of PT (Particulate Matter) $\leq$ 15.88 lbs/hr. If the process weight rate for the unit is 1,000 lbs/hr or less, the limit on emissions of particulate matter is 2.34 lb/hr. If the process weight rate for the unit is above 1,000 lbs/hr, the limit on emissions of particulate matter from the unit can be determined (in lbs/hr) by taking the process weight rate for materials introduced into the unit (in tons/hr), raising the process weight rate value to the 0.62 power, and multiplying by 3.59 (maximum = 3.59 x process weight rate^0.62).
		Compliance Demonstration:
		Compliance will be demonstrated from the following emission calculation basis, processing rate limitation and monitoring requirements:
		PT emission in pounds per hour = (monthly processing rate in tons/month)(1 month/hours of operation that month)(emission factor of 4.85lb PT/ton)(1-control efficiency of 0.9985).
		The processing rate of this equipment shall not exceed 11 tons/ hour with control device in use at all times of operation.
		See Monitoring Requirements for monitoring rates and visual inspection of controls. [401 KAR 59:010 Section 3(2)] Statistical basis: Three-hour average.
L-2	Visible Emissions	Each unit shall have Visible Emissions < 20 % opacity Compliance Demonstration:
		Refer to Recordkeeping (T-2) and Monitoring (T-5) requirements for this unit.
		Limitation. [401 KAR 59:010 Section 3(1)] Statistical basis: Six-minute average.

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### Narrative Requirements:

#### **Applicable Regulations:**

Condition No.	Condition
T-1	Applicable Regulations: New process operations is applicable to each affected facility associated with a process operation commenced after July 2, 1975 and limits particulate emissions. [401 KAR 59:010]
Recordkeeping:	
Condition	

Condition	
No.	Condition

T-2

Recordkeeping: The permitee shall maintain records of the following: 1) monthly hours of operation and material processing rate; 2) the daily log of pressure drop readings of incoming and outgoing air for the dust collectors; 3) the monthly log of qualitative visual observation of opacity of emissions and the opacity determined by Reference Method 9, if any were taken, and repairs that were made due to any opacity reading which exceeded the standard. [401 KAR Chapter 52 Section 10]

#### **Monitoring:**

Condition No.	Condition
T-3	Monitoring: The permittee shall monitor the amount of material processed on a monthly basis. [401 KAR Chapter 52 Section 10]
T-4	Monitoring: The permittee shall monitor the hours of operation of the unit on a monthly basis. [401 KAR Chapter 52 Section 10]
T-5	Monitoring: The permittee shall perform a qualitative visible observation of the opacity of emissions from each stack on a monthly basis and maintain a log of the observation. If visible emission from a stack are seen, then the opacity shall be determined by EPA Reference Method 9 and an inspection shall be initiated for any necessary repairs. [401 KAR Chapter 52 Section 10]
T-6	Monitoring: The permitee shall monitor the pressure drop of incoming and outgoing air for the dust collectors on a daily basis. [401 KAR Chapter 52 Section 10]

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### EQPT15 (017) Emission Point 17 (BV-28) Salt feeder bin (Crutcher, high suds, bin vent)

Condition		
No.	Parameter	Condition
L-1	PT (Particulate Matter)	Each unit shall have a maximum emissions of PT (Particulate Matter) <= 7.81 lbs/hr. If the process weight rate for the unit is 1,000 lbs/hr or less, the limit on emissions of particulate matter is 2.34 lb/hr. If the process weight rate for the unit is above 1,000 lbs/hr, the limit on emissions of particulate matter from the unit can be determined (in lbs/hr) by taking the process weight rate for materials introduced into the unit (in tons/hr), raising the process weight rate value to the 0.62 power, and multiplying by 3.59 (maximum = 3.59 x process weight rate^0.62).
		Compliance Demonstration:
		Compliance will be demonstrated from the following emission calculation basis, processing rate limitation and monitoring requirements:
		PT emission in pounds per hour = (monthly processing rate in tons/month)(1 month/hours of operation that month)(emission factor of 3.05lb PT/ton)(1-control efficiency of 0.9985).
		The processing rate of this equipment shall not exceed 3.5 tons/hour with control device in use at all times of operation.
		See Monitoring Requirements for monitoring rates and visual inspection of controls. [401 KAR 59:010 Section 3(2)] Statistical basis: Three-hour average.
L-2	Visible Emissions	Each unit shall have Visible Emissions < 20 % opacity
		Compliance Demonstration:
		Refer to Recordkeeping (T-2) and Monitoring (T-5) requirements for this unit.
		Limitation. [401 KAR 59:010 Section 3(1)] Statistical basis: Six-minute average.

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### Narrative Requirements:

### **Applicable Regulations:**

Condition	
No.	Condition
T-1	Applicable Regulations: New process operations is applicable to each affected facility associated with a process operation commenced after July 2, 1975 and limits particulate emissions. [401 KAR 59:010]
Record	dkeeping:
Condition No.	Condition

Recordkeeping: The permitee shall maintain records of the following: 1) monthly hours of operation and material processing rate; 2) the daily log of pressure drop readings of incoming and outgoing air for the dust collectors; 3) the monthly log of qualitative visual observation of opacity of emissions and the opacity determined by Reference Method 9, if any were taken, and repairs that were made due to any opacity reading which exceeded the standard. [401 KAR Chapter 52 Section 10]

#### **Monitoring:**

T-2

Condition No.	Condition
T-3	Monitoring: The permittee shall monitor the amount of material processed on a monthly basis. [401 KAR Chapter 52 Section 10]
T-4	Monitoring: The permittee shall monitor the hours of operation of the unit on a monthly basis. [401 KAR Chapter 52 Section 10]
T-5	Monitoring: The permittee shall perform a qualitative visible observation of the opacity of emissions from each stack on a monthly basis and maintain a log of the observation. If visible emission from a stack are seen, then the opacity shall be determined by EPA Reference Method 9 and an inspection shall be initiated for any necessary repairs. [401 KAR Chapter 52 Section 10]
T-6	Monitoring: The permitee shall monitor the pressure drop of incoming and outgoing air for the dust collectors on a daily basis. [401 KAR Chapter 52 Section 10]

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EQPT16 (018) Emission Point 18 (BV-35) Zeolite feeder bin (Crutcher, high suds, bin vent)

### Limitation Requirements:

Condition	ı	
No.	Parameter	Condition
L-1	PT (Particulate Matter)	Each unit shall have a maximum emissions of PT (Particulate Matter) <= 4.02 lbs/hr. If the process weight rate for the unit is 1,000 lbs/hr or less, the limit on emissions of particulate matter is 2.34 lb/hr. If the process weight rate for the unit is above 1,000 lbs/hr, the limit on emissions of particulate matter from the unit can be determined (in lbs/hr) by taking the process weight rate for materials introduced into the unit (in tons/hr), raising the process weight rate value to the 0.62 power, and multiplying by 3.59 (maximum = 3.59 x process weight rate^0.62).
		Compliance Demonstration:
		Compliance will be demonstrated from the following emission calculation basis, processing rate limitation and monitoring requirements:
		PT emission in pounds per hour= (monthly processing rate in tons/month)(1 month/hours of operation that month)(emission factor of 1.11 lb PT/ton)(1-control efficiency of 0.9985).
		The processing rate of this equipment shall not exceed 1.2 tons/hour with control devices in use at all times of operation.
		See Monitoring Requirements for monitoring rates and visual inspection of controls. [401 KAR 59:010 Section 3(2)] Statistical basis: Three-hour average.
L-2	Visible Emissions	Each unit shall have Visible Emissions < 20 % opacity
		Compliance Demonstration:
		Refer to Recordkeeping (T-2) and Monitoring (T-5) requirements for this unit.
		Limitation. [401 KAR 59:010 Section 3(1)] Statistical basis: Six-minute average.

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### Narrative Requirements:

### **Applicable Regulations:**

Condition			
No.	Condition		
T-1	Applicable Regulations: New process operations is applicable to each affected facility associated with a process operation commenced after July 2, 1975 and limits particulate emissions. [401 KAR 59:010]		
Record	Recordkeeping:		
Condition			
No.	Condition		

T-2 Recordkeeping: The permitee shall maintain records of the following: 1) monthly hours of operation and material processing rate; 2) the daily log of pressure drop readings of incoming and outgoing air for the dust collectors; 3) the monthly log of qualitative visual observation of opacity of emissions and the opacity determined by Reference Method 9, if any were taken, and repairs that were made due to any opacity reading which exceeded the standard. [401 KAR Chapter 52 Section 10]

#### **Monitoring:**

Condition No.	Condition
T-3	Monitoring: The permittee shall monitor the amount of material processed on a monthly basis. [401 KAR Chapter 52 Section 10]
T-4	Monitoring: The permittee shall monitor the hours of operation of the unit on a monthly basis. [401 KAR Chapter 52 Section 10]
T-5	Monitoring: The permittee shall perform a qualitative visible observation of the opacity of emissions from each stack on a monthly basis and maintain a log of the observation. If visible emission from a stack are seen, then the opacity shall be determined by EPA Reference Method 9 and an inspection shall be initiated for any necessary repairs. [401 KAR Chapter 52 Section 10]
T-6	Monitoring: The permitee shall monitor the pressure drop of incoming and outgoing air for the dust collectors on a daily basis. [401 KAR Chapter 52 Section 10]

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### EQPT22 (024) Emission Point 24 (BV-30) Salt feeder bin (Post-add, low & high suds, bin vent)

Condition		
No.	Parameter	Condition
L-1	PT (Particulate Matter)	Each unit shall have a maximum emissions of PT (Particulate Matter) <= 15.87 lbs/hr. If the process weight rate for the unit is 1,000 lbs/hr or less, the limit on emissions of particulate matter is 2.34 lb/hr. If the process weight rate for the unit is above 1,000 lbs/hr, the limit on emissions of particulate matter from the unit can be determined (in lbs/hr) by taking the process weight rate for materials introduced into the unit (in tons/hr), raising the process weight rate value to the 0.62 power, and multiplying by 3.59 (maximum = 3.59 x process weight rate^0.62).
		Compliance Demonstration:
		Compliance will be demonstrated from the following emission calculation basis, processing rate limitation and monitoring requirements:
		PT emission in pounds per hour = (monthly processing rate in tons/month)(1 month/hours of operation that month)(emission factor of 2.5lb PT/ton)(1-control efficiency of 0.9985).
		The processing rate of this equipment shall not exceed 11.5 tons/hour with control device in use at all times of operation.
		See Monitoring Requirements for monitoring rates and visual inspection of controls. [401 KAR 59:010 Section 3(2)] Statistical basis: Three-hour average.
L-2	Visible Emissions	Each unit shall have Visible Emissions < 20 % opacity
		Compliance Demonstration:
		Refer to Recordkeeping (T-2) and Monitoring (T-5) requirements for this unit.
		Limitation. [401 KAR 59:010 Section 3(1)] Statistical basis: Six-minute average.

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### Narrative Requirements:

#### **Applicable Regulations:**

Condition No.	Condition	
T-1	Applicable Regulations: New process operations is applicable to each affected facility associated with a process operation commenced after July 2, 1975 and limits particulate emissions. [401 KAR 59:010]	
Recordkeeping:		

Condition	
No.	Condition

T-2

Recordkeeping: The permitee shall maintain records of the following: 1) monthly hours of operation and material processing rate; 2) the daily log of pressure drop readings of incoming and outgoing air for the dust collectors; 3) the monthly log of qualitative visual observation of opacity of emissions and the opacity determined by Reference Method 9, if any were taken, and repairs that were made due to any opacity reading which exceeded the standard. [401 KAR Chapter 52 Section 10]

#### **Monitoring:**

Condition No.	Condition
T-3	Monitoring: The permittee shall monitor the amount of material processed on a monthly basis. [401 KAR Chapter 52 Section 10]
T-4	Monitoring: The permittee shall monitor the hours of operation of the unit on a monthly basis. [401 KAR Chapter 52 Section 10]
T-5	Monitoring: The permittee shall perform a qualitative visible observation of the opacity of emissions from each stack on a monthly basis and maintain a log of the observation. If visible emission from a stack are seen, then the opacity shall be determined by EPA Reference Method 9 and an inspection shall be initiated for any necessary repairs. [401 KAR Chapter 52 Section 10]
T-6	Monitoring: The permitee shall monitor the pressure drop of incoming and outgoing air for the dust collectors on a daily basis. [401 KAR Chapter 52 Section 10]

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### EQPT26 (028) Emission Point 28 (BV-25) Zeolite day tank (Post-add, low & high suds, bin vent)

Condition		
No.	Parameter	Condition
L-1	PT (Particulate Matter)	Each unit shall have a maximum emissions of PT (Particulate Matter) <= 9.37 lbs/hr. If the process weight rate for the unit is 1,000 lbs/hr or less, the limit on emissions of particulate matter is 2.34 lb/hr. If the process weight rate for the unit is above 1,000 lbs/hr, the limit on emissions of particulate matter from the unit can be determined (in lbs/hr) by taking the process weight rate for materials introduced into the unit (in tons/hr), raising the process weight rate value to the 0.62 power, and multiplying by 3.59 (maximum = 3.59 x process weight rate^0.62).
		Compliance Demonstration:
		Compliance will be demonstrated from the following emission calculation basis, processing rate limitation and monitoring requirements:
		PT emission in pounds per hour = (monthly processing rate in tons/month)(1 month/hours of operation that month)(emission factor of 0.85 lb PT/ton)(1-control efficiency of 0.9985).
		The processing rate of this equipment shall not exceed 4.7 tons/hour with control device in used at all times of operation.
		See Monitoring Requirements for monitoring rates and visual inspection of controls. [401 KAR 59:010 Section 3(2)] Statistical basis: Three-hour average.
L-2	Visible Emissions	Each unit shall have Visible Emissions < 20 % opacity
		Compliance Demonstration:
		Refer to Recordkeeping (T-2) and Monitoring (T-5) requirements for this unit.
		Limitation. [401 KAR 59:010 Section 3(1)] Statistical basis: Six-minute average.

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### Narrative Requirements:

### **Applicable Regulations:**

Condition No.	Condition
T-1	Applicable Regulations: New process operations is applicable to each affected facility associated with a process operation commenced after July 2, 1975 and limits particulate emissions. [401 KAR 59:010]
Recordkeeping:	
Condition No.	Condition

T-2 Recordkeeping: The permitee shall maintain records of the following: 1) monthly hours of operation and material processing rate; 2) the daily log of pressure drop readings of incoming and outgoing air for the dust collectors; 3) the monthly log of qualitative visual observation of opacity of emissions and the opacity determined by Reference Method 9, if any were taken, and repairs that were made due to any opacity reading which exceeded the standard. [401 KAR Chapter 52 Section 10]

#### **Monitoring:**

Condition No.	Condition
T-3	Monitoring: The permittee shall monitor the amount of material processed on a monthly basis. [401 KAR Chapter 52 Section 10]
T-4	Monitoring: The permittee shall monitor the hours of operation of the unit on a monthly basis. [401 KAR Chapter 52 Section 10]
T-5	Monitoring: The permittee shall perform a qualitative visible observation of the opacity of emissions from each stack on a monthly basis and maintain a log of the observation. If visible emission from a stack are seen, then the opacity shall be determined by EPA Reference Method 9 and an inspection shall be initiated for any necessary repairs. [401 KAR Chapter 52 Section 10]
T-6	Monitoring: The permitee shall monitor the pressure drop of incoming and outgoing air for the dust collectors on a daily basis. [401 KAR Chapter 52 Section 10]

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### EQPT27 (029) Emission Point 29 (DC-3) 7 Packaging Machines (Tower, low & high suds baghouse)

Condition		
No.	Parameter	Condition
L-1	PT (Particulate Matter)	Each unit shall have a maximum emissions of PT (Particulate Matter) <= 30.9 lbs/hr. If the process weight rate for the unit is 1,000 lbs/hr or less, the limit on emissions of particulate matter is 2.34 lb/hr. If the process weight rate for the unit is above 1,000 lbs/hr but no greater than 60,000 lbs/hr, the limit on emissions of particulate matter from the unit can be determined (in lbs/hr) by taking the process weight rate for materials introduced into the unit (in tons/hr), raising the process weight rate value to the 0.62 power, and multiplying by 3.59 (maximum = 3.59 x process weight rate^0.62). If the process weight rate for the unit is above 60,000 lbs/hr, the limit on emissions of particulate matter from the unit can be determined (in lbs/hr) by taking the process weight rate for materials introduced into the unit (in tons/hr), raising the process weight rate value to the 0.16 power, and multiplying by 17.31 (maximum = 17.31 x process weight rate^0.16).
		Compliance Demonstration:
		Compliance will be demonstrated from the following emission calculation basis, processing rate limitation and monitoring requirements:
		PT emission in pounds per hour = (monthly processing rate in tons/month)(1 month/hours of operation that month)(emission factor of 32.9 lb PT/ton)(1-control efficiency of 0.9985).
		The processing rate of this equipment shall not exceed 37.7 tons/hour with control devices in use at all times of operation.
		See Monitoring Requirements for monitoring rates and visual inspection of controls. [401 KAR 59:010 Section 3(2)] Statistical basis: Three-hour average.
L-2	Visible Emissions	Each unit shall have Visible Emissions < 20 % opacity
		Compliance Demonstration:
		Refer to Recordkeeping (T-2) and Monitoring (T-5) requirements for this unit.
		Limitation. [401 KAR 59:010 Section 3(1)] Statistical basis: Six-minute average.

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### Narrative Requirements:

#### **Applicable Regulations:**

Condition	
No.	Condition
T-1	Applicable Regulations: New process operations is applicable to each affected facility associated with a process operation commenced after July 2, 1975 and limits particulate emissions. [401 KAR 59:010]
Record	dkeeping:
Condition No.	Condition

Recordkeeping: The permitee shall maintain records of the following: 1) monthly hours of operation and material processing rate; 2) the daily log of pressure drop readings of incoming and outgoing air for the dust collectors; 3) the monthly log of qualitative visual observation of opacity of emissions and the opacity determined by Reference Method 9, if any were taken, and repairs that were made due to any opacity reading which exceeded the standard. [401 KAR Chapter 52 Section 10]

#### **Monitoring:**

T-2

Condition No.	Condition
T-3	Monitoring: The permittee shall monitor the amount of material processed on a monthly basis. [401 KAR Chapter 52 Section 10]
T-4	Monitoring: The permittee shall monitor the hours of operation of the unit on a monthly basis. [401 KAR Chapter 52 Section 10]
T-5	Monitoring: The permittee shall perform a qualitative visible observation of the opacity of emissions from each stack on a monthly basis and maintain a log of the observation. If visible emission from a stack are seen, then the opacity shall be determined by EPA Reference Method 9 and an inspection shall be initiated for any necessary repairs. [401 KAR Chapter 52 Section 10]
T-6	Monitoring: The permitee shall monitor the pressure drop of incoming and outgoing air for the dust collectors on a daily basis. [401 KAR Chapter 52 Section 10]

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## EQPT28 (030) Emission Point 30(DC8-DC11) DC-8: Post-add suds collection (Tower, low suds)

Condition		
No.	Parameter	Condition
L-1	PT (Particulate Matter)	Each unit shall have a maximum emissions of PT (Particulate Matter) <= 4.66 lbs/hr. If the process weight rate for the unit is 1,000 lbs/hr or less, the limit on emissions of particulate matter is 2.34 lb/hr. If the process weight rate for the unit is above 1,000 lbs/hr, the limit on emissions of particulate matter from the unit can be determined (in lbs/hr) by taking the process weight rate for materials introduced into the unit (in tons/hr), raising the process weight rate value to the 0.62 power, and multiplying by 3.59 (maximum = 3.59 x process weight rate^0.62).
		Compliance Demonstration:
		Compliance will be demonstrated from the following emission calculation basis, processing rate limitation and monitoring requirements:
		PT emission in pounds per hour = (monthly processing rate in tons/month)(1 month/hours of operation that month)(emission factor of 1072.8 lb PT/ton)(1-control efficiency of 0.9985).
		The processing rate of this emission unit shall not exceed 1.52 tons/hour with control devices in use at all times of operation.
		See Monitoring Requirements for monitoring rates and visual inspection of controls. [401 KAR 59:010 Section 3(2)] Statistical basis: Three-hour average.
L-2	Visible Emissions	Each unit shall have Visible Emissions < 20 % opacity
		Compliance Demonstration:
		Refer to Recordkeeping (T-2) and Monitoring (T-5) requirements for this unit.
		Limitation. [401 KAR 59:010 Section 3(1)] Statistical basis: Six-minute average.

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### Narrative Requirements:

### **Applicable Regulations:**

Condition	
No.	Condition
T-1	Applicable Regulations: New process operations is applicable to each affected facility associated with a process operation commenced after July 2, 1975 and limits particulate emissions. [401 KAR 59:010]
Record	dkeeping:
Condition	
No.	Condition
T-2	Recordkeeping: The permitee shall maintain records of the following: 1) monthly hours of operation and material processing rate; 2) the daily log of pressure drop

Recordkeeping: The permitee shall maintain records of the following: 1) monthly hours of operation and material processing rate; 2) the daily log of pressure drop readings of incoming and outgoing air for the dust collectors; 3) the monthly log of qualitative visual observation of opacity of emissions and the opacity determined by Reference Method 9, if any were taken, and repairs that were made due to any opacity reading which exceeded the standard. [401 KAR Chapter 52 Section 10]

#### **Monitoring:**

Condition No.	Condition
T-3	Monitoring: The permittee shall monitor the amount of material processed on a monthly basis. [401 KAR Chapter 52 Section 10]
T-4	Monitoring: The permittee shall monitor the hours of operation of the unit on a monthly basis. [401 KAR Chapter 52 Section 10]
T-5	Monitoring: The permittee shall perform a qualitative visible observation of the opacity of emissions from each stack on a monthly basis and maintain a log of the observation. If visible emission from a stack are seen, then the opacity shall be determined by EPA Reference Method 9 and an inspection shall be initiated for any necessary repairs. [401 KAR Chapter 52 Section 10]
T-6	Monitoring: The permitee shall monitor the pressure drop of incoming and outgoing air for the dust collectors on a daily basis. [401 KAR Chapter 52 Section 10]

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# EQPT29 (031) Emission Point 31 (DC-12 & DC-13) Packaging fugitive dust collection (Powders package, general ventilation, baghouse) Limitation Requirements:

	Emiliarion requirements.	
Condition No.	Parameter	Condition
L-1	PT (Particulate Matter)	Each unit shall have a maximum emissions of PT (Particulate Matter) <= 3.04 lbs/hr. If the process weight rate for the unit is 1,000 lbs/hr or less, the limit on emissions of particulate matter is 2.34 lb/hr. If the process weight rate for the unit is above 1,000 lbs/hr, the limit on emissions of particulate matter from the unit can be determined (in lbs/hr) by taking the process weight rate for materials introduced into the unit (in tons/hr), raising the process weight rate value to the 0.62 power, and multiplying by 3.59 (maximum = 3.59 x process weight rate^0.62).
		Compliance Demonstration:
		Compliance will be demonstrated from the following emission calculation basis, processing rate limitation and monitoring requirements:
		PT emission in pounds per hour = (monthly processing rate in tons/month)(1 month/hours of operation that month)(emission factor of 1417.5 lb PT/ton)(1-control efficiency of 0.9985).
		The processing rate of this emission unit shall not exceed 0.76 tons/hour with control devices in use at all times of operation.
		See Monitoring Requirements for monitoring rates and visual inspection of controls. [401 KAR 59:010 Section 3(2)] Statistical basis: Three-hour average.
L-2	Visible Emissions	Each unit shall have Visible Emissions < 20 % opacity
		Compliance Demonstration:
		Refer to Recordkeeping (T-2) and Monitoring (T-5) requirements for this unit.
		Limitation. [401 KAR 59:010 Section 3(1)] Statistical basis: Six-minute average.

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### Narrative Requirements:

#### **Applicable Regulations:**

	- Physical Conference of the C		
Condition No.	Condition		
T-1	Applicable Regulations: New process operations is applicable to each affected facility associated with a process operation commenced after July 2, 1975 and limits particulate emissions. [401 KAR 59:010]		
Recor	Recordkeeping:		
Condition No.	Condition		

Recordkeeping: The permitee shall maintain records of the following: 1) monthly hours of operation and material processing rate; 2) the daily log of pressure drop

reading of incoming and outgoing air for the dust collectors; 3) the monthly log of qualitative visual observation of opacity of emissions and the opacity determined by Reference Method 9, if any were taken, and repairs that were made due to any opacity reading which exceeded the standard. [401 KAR Chapter 52 Section 10]

### Monitoring:

T-2

Condition No.	Condition
T-3	Monitoring: The permittee shall monitor the amount of material processed on a monthly basis. [401 KAR Chapter 52 Section 10]
T-4	Monitoring: The permittee shall monitor the hours of operation of the unit on a monthly basis. [401 KAR Chapter 52 Section 10]
T-5	Monitoring: The permittee shall perform a qualitative visible observation of the opacity of emissions from each stack on a monthly basis and maintain a log of the observation. If visible emission from a stack are seen, then the opacity shall be determined by EPA Reference Method 9 and an inspection shall be initiated for any necessary repairs. [401 KAR Chapter 52 Section 10]
T-6	Monitoring: The permitee shall monitor the pressure drop of incoming and outgoing air for the dust collectors on a daily basis. [401 KAR Chapter 52 Section 10]

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### EQPT32 (033) Emission Point 33 (Liquids area II process MES powder supersack system)

Date installed: 4/15/04

Condition	n	
No.	Parameter	Condition
L-1	PT (Particulate Matter)	Each unit shall have a maximum emissions of PT (Particulate Matter) <= 8.4 lbs/hr. If the process weight rate for the unit is 1,000 lbs/hr or less, the limit on emissions of particulate matter is 2.34 lb/hr. If the process weight rate for the unit is above 1,000 lbs/hr, the limit on emissions of particulate matter from the unit can be determined (in lbs/hr) by taking the process weight rate for materials introduced into the unit (in tons/hr), raising the process weight rate value to the 0.62 power, and multiplying by 3.59 (maximum = 3.59 x process weight rate^0.62).
		Compliance Demonstration:
		Compliance will be demonstrated from the following emission calculation basis, processing rate limitation and monitoring requirements:
		PT emission in pounds per hour = (monthly processing rate in tons/month)(1 month/hours of operation that month)(emission factor of 39.4 lb PT/ton)(1-control efficiency of 0.9985).
		The processing rate of this equipment shall not exceed 3.94 tons/hour with control device in use at all times of operation.
		See Monitoring Requirements for monitoring rates and visual inspection of controls. [401 KAR 59:010 Section 3(2)] Statistical basis: Three-hour average.
L-2	Visible Emissions	Each unit shall have Visible Emissions < 20 % opacity Compliance Demonstration:
		Refer to Recordkeeping (T-2) and Monitoring (T-5) requirements for this unit.
		Limitation. [401 KAR 59:010 Section 3(1)] Statistical basis: Six-minute average.

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### Narrative Requirements:

### **Applicable Regulations:**

Condition No.	Condition		
T-1	Applicable Regulations: New process operations is applicable to each affected facility associated with a process operation commenced after July 2, 1975 and limits particulate emissions. [401 KAR 59:010]		
Recor	Recordkeeping:		
Condition No.	Condition		

Recordkeeping: The permitee shall maintain records of the following: 1) monthly hours of operation and material processing rate; 2) the daily log of pressure drop readings of incoming and outgoing air for the dust collectors; 3) the monthly log of qualitative visual observation of opacity of emissions and the opacity determined by Reference Method 9, if any were taken, and repairs that were made due to any opacity reading which exceeded the standard. [401 KAR Chapter 52 Section 10]

#### **Monitoring:**

T-2

Condition No.	Condition
T-3	Monitoring: The permittee shall monitor the amount of material processed on a monthly basis. [401 KAR Chapter 52 Section 10]
T-4	Monitoring: The permittee shall monitor the hours of operation of the unit on a monthly basis. [401 KAR Chapter 52 Section 10]
T-5	Monitoring: The permittee shall perform a qualitative visible observation of the opacity of emissions from each stack on a monthly basis and maintain a log of the observation. If visible emission from a stack are seen, then the opacity shall be determined by EPA Reference Method 9 and an inspection shall be initiated for any necessary repairs. [401 KAR Chapter 52 Section 10]
T-6	Monitoring: The permitee shall monitor the pressure drop of incoming and outgoing air for the dust collectors on a daily basis. [401 KAR Chapter 52 Section 10]

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### EQPT33 (034) Emission Point 34 Powder MES Supersack System (Post-add, low & high suds, bin vent)

Condition	l	
No.	Parameter	Condition
L-1	PT (Particulate Matter)	Each unit shall have a maximum emissions of PT (Particulate Matter) $\leq$ 16.8 lbs/hr. If the process weight rate for the unit is 1,000 lbs/hr or less, the limit on emissions of particulate matter is 2.34 lb/hr. If the process weight rate for the unit is above 1,000 lbs/hr, the limit on emissions of particulate matter from the unit can be determined (in lbs/hr) by taking the process weight rate for materials introduced into the unit (in tons/hr), raising the process weight rate value to the 0.62 power, and multiplying by 3.59 (maximum = 3.59 x process weight rate $^{\circ}$ 0.62).
		Compliance Demonstration:
		Compliance will be demonstrated from the following emission calculation basis, processing rate limitation and monitoring requirements:
		PT emission in pounds per hour = (monthly processing rate in tons/month)(1 month/hours of operation that month)(emission factor of 7 lb PT/ton)(1-control efficiency of 0.9985).
		The processing rate of this emission unit shall not exceed 24 tons/hour with control devices in use at all times of operation.
		See Monitoring Requirements for monitoring rates and visual inspection of controls. [401 KAR 59:010 Section 3(2)] Statistical basis: Three-hour average.
L-2	Visible Emissions	Each unit shall have Visible Emissions < 20 % opacity
		Compliance Demonstration:
		Refer to Recordkeeping (T-2) and Monitoring (T-5) requirements for this unit.
		Limitation. [401 KAR 59:010 Section 3(1)] Statistical basis: Six-minute average.

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### Narrative Requirements:

#### **Applicable Regulations:**

Condition No.	Condition
T-1	Applicable Regulations: New process operations is applicable to each affected facility associated with a process operation commenced after July 2, 1975 and limits particulate emissions. [401 KAR 59:010]
Recordkeeping:	

Condition	
No.	Condition

T-2

Recordkeeping: The permitee shall maintain records of the following: 1) monthly hours of operation and material processing rate; 2) the daily log of pressure drop readings of incoming and outgoing air for the dust collectors; 3) the monthly log of qualitative visual observation of opacity of emissions and the opacity determined by Reference Method 9, if any were taken, and repairs that were made due to any opacity reading which exceeded the standard. [401 KAR Chapter 52 Section 10]

#### **Monitoring:**

Condition No.	Condition
T-3	Monitoring: The permittee shall monitor the amount of material processed on a monthly basis. [401 KAR Chapter 52 Section 10]
T-4	Monitoring: The permittee shall monitor the hours of operation of the unit on a monthly basis. [401 KAR Chapter 52 Section 10]
T-5	Monitoring: The permittee shall perform a qualitative visible observation of the opacity of emissions from each stack on a monthly basis and maintain a log of the observation. If visible emission from a stack are seen, then the opacity shall be determined by EPA Reference Method 9 and an inspection shall be initiated for any necessary repairs. [401 KAR Chapter 52 Section 10]
T-6	Monitoring: The permitee shall monitor the pressure drop of incoming and outgoing air for the dust collectors on a daily basis. [401 KAR Chapter 52 Section 10]

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GACT1 (Insignificant) All insignificant activities:

Narrative Requirements:

Condition No.	Condition
T-1	The activities within this group have been determined to be insignificant activities for this source pursuant to 401 KAR 52:030 Section 6. While these activities are designated as insignificant the permittee must comply with the applicable regulation and some minimal level of periodic monitoring may be necessary. [401 KAR 52:030 Section 6]

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### GACT2 (001 & 003) Emission Unit 01& 03 (Boiler #1 & #3):

Condition No.	Parameter	Condition
L-1	SO2 (Sulfur Dioxide)	The unit shall have emissions of SO2 (Sulfur Dioxide) <= 1.67 lb/mm Btu actual heat input.
		Compliance Demonstration Method:
		Compliance is demonstrated with AP-42 (Chapter 1, Table 1.4-2) emission factor of 0.6 lb/mmcuft natural gas and a natural gas heat capacity of 1020 mmBtu/mmcuft natural gas.
		Limitation. [401 KAR 59:015 Section 5(1)] This requirement is applicable during the following months: All Year. Statistical basis: Three-hour average.
L-2	PT (Particulate Matter)	The unit shall have emissions of PT (Particulate Matter) <= 0.40 lb/mm Btu actual heat input.
		Compliance Demonstration Method:
		Compliance is demonstrated with AP-42 (Chapter 1, Table 1.4-2) emission factor of 7.6 lb/mmcuft natural gas and a natural gas heat capacity of 1020 mmBtu/mmcuft natural gas.
		Limitation. [401 KAR 59:015 Section 4(1)] This requirement is applicable during the following months: All Year. Statistical basis: Three-hour average.
L-3	Visible Emissions	The unit shall have Visible Emissions <= 20 % opacity except for emissions occurring during cleaning of the firebox, blowing of soot and building of a new fire.
		Compliance Demonstration Method:
		Compliance with the opacity limit is demonstrated while the boiler is fired with natural gas.
		Limitation. [401 KAR 59:015 Section 4(2)] This requirement is applicable during the following months: All Year. Statistical basis: Six-minute average.

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### Limitation Requirements:

Condition No.	Parameter	Condition
L-4	Visible Emissions	While cleaning of the fire box or blowing of soot is being done, Visible Emissions <= 40 % opacity shall be permitted for not more than 6 consecutive minutes in any 60 consecutive minutes. [401 KAR 59:015 Section 4(2)] This requirement is applicable during the following months: All Year. Statistical basis: Six-minute average.

### Monitoring Requirements:

Condition No.	Parameter	Condition
M-1	fuel	The amount of each combusted fuel monitored by approved method(s) daily shall be determined for the unit. [401 KAR Chapter 52 Section 10] This requirement is applicable during the following months: All Year. Statistical basis: Instantaneous determination.

### Narrative Requirements:

### **Applicable Regulations:**

Condition No.	Condition
T-1	Applicable Regulations: New Indirect Heat Exchangers applies to new affected facilities less than 250 MM Btu/hr commenced on or after April 9, 1972. [401 KAR 59:015]
T-2	Applicable Regulations: 40 CFR Part 60 standards of performance for new stationary sources is applicable due to incorporation by reference of 40 CFR 60 Subpart Dc, Standards of performance for small industrial-commercial-institutional steam generating units. 40 CFR 60 Subpart Dc applies to each affected facility that commenced construction after June 9, 1989. [401 KAR 60:005 Section 3(e)]

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Narrative Requirements:			
Recor	Recordkeeping:		
Condition			
No.	Condition		
T-3	Recordkeeping: Record and maintain records of the amount of each fuel combusted by the unit during each day. [40 CFR 60.48c(g)]		

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### GACT3 (002 & 004) Emission Unit 02 & 04 (Boiler #2 & #4):

Condition No.	Parameter	Condition
	1 drameter	Condition
L-1	SO2 (Sulfur Dioxide)	The unit shall have emissions of SO2 (Sulfur Dioxide) <= 1.67 lb/mm Btu actual heat input.
		Compliance Demonstration Method:
		Compliance is demonstrated with AP-42 (Chapter 1, Table 1.4-2) emission factor of 0.6 lb/mmcuft natural gas and a natural gas heat capacity of 1020 mmBtu/mmcuft natural gas.
		Limitation. [401 KAR 59:015 Section 5(1)] This requirement is applicable during the following months: All Year. Statistical basis: Three-hour average.
L-2	PT (Particulate Matter)	The unit shall have emissions of PT (Particulate Matter) <= 0.40 lb/mm Btu actual heat input.
		Compliance Demonstration Method:
		Compliance is demonstrated with AP-42 (Chapter 1, Table 1.4-2) emission factor of 7.6 lb/mmcuft natural gas and a natural gas heat capacity of 1020 mmBtu/mmcuft natural gas.
		Limitation. [401 KAR 59:015 Section 4(1)] This requirement is applicable during the following months: All Year. Statistical basis: Three-hour average.
L-3	Visible Emissions	The unit shall have Visible Emissions <= 20 % opacity except for emissions occurring during cleaning of the firebox, blowing of soot and building of a new fire.
		Compliance Demonstration Method:
		Compliance with the opacity limit is demonstrated while the boiler is fired with natural gas.
		Limitation. [401 KAR 59:015 Section 4(2)] This requirement is applicable during the following months: All Year. Statistical basis: Six-minute average.

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### Limitation Requirements:

Condition No.	Parameter	Condition
L-4	Visible Emissions	While cleaning of the fire box or blowing of soot is being done, Visible Emissions <= 40 % opacity shall be permitted for not more than 6 consecutive minutes in any 60 consecutive minutes. [401 KAR 59:015 Section 4(2)] This requirement is applicable during the following months: All Year. Statistical basis: Six-minute average.
Monitoring Requirements:		

Condition		
No.	Parameter	Condition
M-1	fuel	The amount of each combusted fuel monitored by approved method(s) monthly shall be determined for the unit. [401 KAR Chapter 52] This requirement is applicable during the following months: All Year. Statistical basis: Instantaneous determination.

### Narrative Requirements:

### **Applicable Regulations:**

Condition No.	Condition
T-1	Applicable Regulations: New Indirect Heat Exchangers applies to new affected facilities less than 250 MM Btu/hr commenced on or after April 9, 1972. [401 KAR 59:015]

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## GACT4 (019, 020 & 021) Emission Unit 19 (High suds dust collection, DC-6), Emission Unit 20 (Spray tower, WS-1) Emission Unit 21(Cage mill, DC-1):

Condition No.	Parameter	Condition
L-1	PT (Particulate Matter)	Each unit shall have a maximum emissions of PT (Particulate Matter) <= 21.32 lbs/hr. If the process weight rate for the unit is 1,000 lbs/hr or less, the limit on emissions of particulate matter is 2.34 lb/hr. If the process weight rate for the unit is above 1,000 lbs/hr, the limit on emissions of particulate matter from the unit can be determined (in lbs/hr) by taking the process weight rate for materials introduced into the unit (in tons/hr), raising the process weight rate value to the 0.62 power, and multiplying by 3.59 (maximum = 3.59 x process weight rate^0.62).
		Compliance Demonstration:
		Compliance will be demonstrated from the following emission calculation basis, processing rate limitation and monitoring requirements:
		PT emission in pounds per hour = (monthly processing rate in tons/month)(1 month/hours of operation that month)(emission factor listed below)(1-control efficiency of 0.98).  Emission factor based on mass balance: EU19 = 19.36 lb/ton, EU20 = 15.07 lb/ton, EU21 = 94.09 lb/ton
		The processing rate of each equipment shall not exceed 17.7 tons/hour with control devices used at all times of operation.
		See Monitoring Requirements for monitoring rates and visual inspection of controls. [401 KAR 59:010 Section 3(2)] Statistical basis: Three-hour average.
L-2	Visible Emissions	Each unit shall have Visible Emissions < 20 % opacity
		Compliance Demonstration:
		Refer to Recordkeeping Requirements (T-2) and Monitoring (T-5) for this unit.
		Limitation. [401 KAR 59:010 Section 3(1)] Statistical basis: Six-minute average.

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### Narrative Requirements:

### **Applicable Regulations:**

Condition No.	Condition
T-1	Applicable Regulations: New process operations is applicable to each affected facility associated with a process operation commenced after July 2, 1975 and limits particulate emissions. [401 KAR 59:010]
Recordkeeping:	
Condition	

No.	Condition
T-2	Recordkeeping: The permitee shall maintain records of the following: 1) monthly hours of operation and ma

Recordkeeping: The permitee shall maintain records of the following: 1) monthly hours of operation and material processing rate; 2) the daily log of pressure drop readings of incoming and outgoing air for the dust collectors and daily log of pressure drop and water flow rate for the wet scrubber; 3) the monthly log of qualitative visual observation of opacity of emissions and the opacity determined by Reference Method 9, if any were taken, and repairs that were made due to any opacity reading which exceeded the standard. [401 KAR Chapter 52 Section 10]

### **Monitoring:**

Condition No.	Condition
T-3	Monitoring: The permittee shall monitor the amount of material processed on a monthly basis. [401 KAR Chapter 52 Section 10]
T-4	Monitoring: The permittee shall monitor the hours of operation of the unit on a monthly basis. [401 KAR Chapter 52 Section 10]
T-5	Monitoring: The permittee shall perform a qualitative visible observation of the opacity of emissions from each stack on a monthly basis and maintain a log of the observation. If visible emission from a stack are seen, then the opacity shall be determined by EPA Reference Method 9 and an inspection shall be initiated for any necessary repairs. [401 KAR Chapter 52 Section 10]
T-6	Monitoring: The permitee shall monitor the pressure drop readings of incoming and outgoing air for the dust collectors and pressure drop and water flow rate for the wet scrubber on a daily basis. [401 KAR Chapter 52 Section 10]

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## GACT5 (025 & 027) Emission Unit 25 (Low suds dust collection, DC-7) Emission Unit 27 (Fluid bed dryer, DC-2):

Condition		
No.	Parameter	Condition
L-1	PT (Particulate Matter)	Each unit shall have a maximum emissions of PT (Particulate Matter) <= 23.0 lbs/hr. If the process weight rate for the unit is 1,000 lbs/hr or less, the limit on emissions of particulate matter is 2.34 lb/hr. If the process weight rate for the unit is above 1,000 lbs/hr, the limit on emissions of particulate matter from the unit can be determined (in lbs/hr) by taking the process weight rate for materials introduced into the unit (in tons/hr), raising the process weight rate value to the 0.62 power, and multiplying by 3.59 (maximum = 3.59 x process weight rate^0.62).
		Compliance Demonstration:
		Compliance will be demonstrated from the following emission calculation basis, processing rate limitation and monitoring requirements:
		PT emission in pounds per hour = (monthly processing rate in tons/month)(1 month/hours of operation that month)(emission factor listed below)(1-control efficiency of 0.9985). Emission factor base on mass balance: EU25 = 17.13 lb/ton, EU27 = 156.77 lb/ton.
		The processing rate of each equipment shall not exceed 20 tons/hour with control devices used at all times of operation.
		See Monitoring Requirements for monitoring rates and visual inspection of controls. [401 KAR 59:010 Section 3(2)] Statistical basis: Three-hour average.
L-2	Visible Emissions	Each unit shall have Visible Emissions < 20 % opacity
		Compliance Demonstration:
		Refer to Recordkeeping Requirements (T-2) and Monitoring (T-5) for this unit.
		Limitation. [401 KAR 59:010 Section 3(1)] Statistical basis: Six-minute average.

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### Narrative Requirements:

### **Applicable Regulations:**

Condition No.	Condition	
T-1	Applicable Regulations: New process operations is applicable to each affected facility associated with a process operation commenced after July 2, 1975 and limits particulate emissions. [401 KAR 59:010]	
Recor	Recordkeeping:	
Condition No.	Condition	

Recordkeeping: The permitee shall maintain records of the following: 1) monthly hours of operation and material processing rate; 2) the daily log of pressure drop reading of incoming and outgoing air for the dust collectors; 3) the monthly log of qualitative visual observation of opacity of emissions and the opacity determined by Reference Method 9, if any were taken, and repairs that were made due to any opacity reading which exceeded the standard. [401 KAR Chapter 52 Section 10]

#### **Monitoring:**

T-2

Condition No.	Condition
T-3	Monitoring: The permittee shall monitor the amount of material processed on a monthly basis. [401 KAR Chapter 52 Section 10]
T-4	Monitoring: The permittee shall monitor the hours of operation of the unit on a monthly basis. [401 KAR Chapter 52 Section 10]
T-5	Monitoring: The permittee shall perform a qualitative visible observation of the opacity of emissions from each stack on a monthly basis and maintain a log of the observation. If visible emission from a stack are seen, then the opacity shall be determined by EPA Reference Method 9 and an inspection shall be initiated for any necessary repairs. [401 KAR Chapter 52 Section 10]
T-6	Monitoring: The permitee shall monitor the pressure drop of incoming and outgoing air for the dust collectors on a daily basis. [401 KAR Chapter 52 Section 10]

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## GACT6 (007 & 026) Emission Unit 07 (Soda ash 100 storage bin, BV-14) Emission Unit 26 (Soda ash 100 feeder bin, BV-33):

Condition		
No.	Parameter	Condition
L-1	PT (Particulate Matter)	Each unit shall have a maximum emissions of PT (Particulate Matter) $\leq$ 14.97 lbs/hr. If the process weight rate for the unit is 1,000 lbs/hr or less, the limit on emissions of particulate matter is 2.34 lb/hr. If the process weight rate for the unit is above 1,000 lbs/hr, the limit on emissions of particulate matter from the unit can be determined (in lbs/hr) by taking the process weight rate for materials introduced into the unit (in tons/hr), raising the process weight rate value to the 0.62 power, and multiplying by 3.59 (maximum = 3.59 x process weight rate $^{0.62}$ ).
		Compliance Demonstration:
		Compliance will be demonstrated from the following emission calculation basis, processing rate limitation and monitoring requirements:
		PT emission in pounds per hour = (monthly processing rate in tons/month)(1 month/hours of operation that month)(emission factor listed below)(1-control efficiency of 0.9985). Emission factor based on mass balance: EU7 = 4.87 lb/ton, EU26 = 3.47 lb/ton.
		The processing rate of each equipment shall not exceed 10 tons/hour with control devices in use at all times of operation.
		See Monitoring Requirements for monitoring rates and visual inspection of controls. [401 KAR 59:010 Section 3(2)] Statistical basis: Three-hour average.
L-2	Visible Emissions	Each unit shall have Visible Emissions < 20 % opacity
		Compliance Demonstration:
		Refer to Recordkeeping (T-2) and Monitoring (T-5) requirements for this unit.
		Limitation. [401 KAR 59:010 Section 3(1)] Statistical basis: Six-minute average.

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### Narrative Requirements:

#### **Applicable Regulations:**

Condition No.	Condition
T-1	Applicable Regulations: New process operations is applicable to each affected facility associated with a process operation commenced after July 2, 1975 and limits particulate emissions. [401 KAR 59:010]
Recordkeeping:	
Condition	

## No. Condition

T-2

Recordkeeping: The permitee shall maintain records of the following: 1) monthly hours of operation and material processing rate; 2) the daily log of pressure drop readings of incoming and outgoing air for the dust collectors; 3) the monthly log of qualitative visual observation of opacity of emissions and the opacity determined by Reference Method 9, if any were taken, and repairs that were made due to any opacity reading which exceeded the standard. [401 KAR Chapter 52 Section 10]

#### **Monitoring:**

Condition No.	Condition
T-3	Monitoring: The permittee shall monitor the amount of material processed on a monthly basis. [401 KAR Chapter 52 Section 10]
T-4	Monitoring: The permittee shall monitor the hours of operation of the unit on a monthly basis. [401 KAR Chapter 52 Section 10]
T-5	Monitoring: The permittee shall perform a qualitative visible observation of the opacity of emissions from each stack on a monthly basis and maintain a log of the observation. If visible emission from a stack are seen, then the opacity shall be determined by EPA Reference Method 9 and an inspection shall be initiated for any necessary repairs. [401 KAR Chapter 52 Section 10]
T-6	Monitoring: The permitee shall monitor the pressure drop of incoming and outgoing air for the dust collectors on a daily basis. [401 KAR Chapter 52 Section 10]

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## GACT7 (008 & 15) Emission Unit 08 (Soda ash 260 storage bin, BV-15) Emission Unit 15 (Soda ash 260 feeder bin, BV-23):

Condition		
No.	Parameter	Condition
L-1	PT (Particulate Matter)	Each unit shall have a maximum emissions of PT (Particulate Matter) $\leq$ 12.0 lbs/hr. If the process weight rate for the unit is 1,000 lbs/hr or less, the limit on emissions of particulate matter is 2.34 lb/hr. If the process weight rate for the unit is above 1,000 lbs/hr, the limit on emissions of particulate matter from the unit can be determined (in lbs/hr) by taking the process weight rate for materials introduced into the unit (in tons/hr), raising the process weight rate value to the 0.62 power, and multiplying by 3.59 (maximum = 3.59 x process weight rate $^{0.62}$ ).
		Compliance Demonstration:
		Compliance will be demonstrated from the following emission calculation basis, processing rate limitation and monitoring requirements:
		PT emission in pounds per hour = (monthly processing rate in tons/month)(1 month/hours of operation that month)(emission factor listed below)(1-control efficiency of 0.9985). Emission factor based on mass balance: EU8 = 4.86 lb/ton, EU15 = 1.71 lb/ton.
		The processing rate of each equipment shall not exceed 7 tons/hour with control devices in use at all times of operation.
		See Monitoring Requirements for monitoring rates and visual inspection of controls. [401 KAR 59:010 Section 3(2)] Statistical basis: Three-hour average.
L-2	Visible Emissions	Each unit shall have Visible Emissions < 20 % opacity
		Compliance Demonstration:
		Refer to Recordkeeping (T-2) and Monitoring (T-5) requirements for this unit.
		Limitation. [401 KAR 59:010 Section 3(1)] Statistical basis: Six-minute average.

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### Narrative Requirements:

### **Applicable Regulations:**

Condition No.	Condition
T-1 Applicable Regulations: New process operations is applicable to each affected facility associated with a process operation commenced after July 2, 1975 and particulate emissions. [401 KAR 59:010]	
Recordkeeping:	
Condition No.	Condition

Recordkeeping: The permitee shall maintain records of the following: 1) monthly hours of operation and material processing rate; 2) the daily log of pressure drop readings of incoming and outgoing air for the dust collectors; 3) the monthly log of qualitative visual observation of opacity of emissions and the opacity determined by Reference Method 9, if any were taken, and repairs that were made due to any opacity reading which exceeded the standard. [401 KAR Chapter 52 Section 10]

#### **Monitoring:**

T-2

Condition No.	Condition
T-3	Monitoring: The permittee shall monitor the amount of material processed on a monthly basis. [401 KAR Chapter 52 Section 10]
T-4	Monitoring: The permittee shall monitor the hours of operation of the unit on a monthly basis. [401 KAR Chapter 52 Section 10]
T-5	Monitoring: The permittee shall perform a qualitative visible observation of the opacity of emissions from each stack on a monthly basis and maintain a log of the observation. If visible emission from a stack are seen, then the opacity shall be determined by EPA Reference Method 9 and an inspection shall be initiated for any necessary repairs. [401 KAR Chapter 52 Section 10]
T-6	Monitoring: The permitee shall monitor the pressure drop of incoming and outgoing air for the dust collectors on a daily basis. [401 KAR Chapter 52 Section 10]

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## GACT8 (009, 014 & 016) Emission Unit 09 (Sodium perborate storage bin, BV-16) Emission Unit 14 (STPP feeder bin, BV-22), Emission Unit 16 (Sodium sulfate feeder bin, BV-26):

Condition		
No.	Parameter	Condition
L-1	PT (Particulate Matter)	Emission units shall have a maximum emissions of PT (Particulate Matter) <= 4.62 lbs/hr for Emission Units 9 and 16, and 11.9 lbs/hr for Emission Unit 14. If the process weight rate for the unit is 1,000 lbs/hr or less, the limit on emissions of particulate matter is 2.34 lb/hr. If the process weight rate for the unit is above 1,000 lbs/hr, the limit on emissions of particulate matter from the unit can be determined (in lbs/hr) by taking the process weight rate for materials introduced into the unit (in tons/hr), raising the process weight rate value to the 0.62 power, and multiplying by 3.59 (maximum = 3.59 x process weight rate^0.62).
		Compliance Demonstration:
		Compliance will be demonstrated from the following emission calculation basis, processing rate limitation and monitoring requirements:
		PT emission in pounds per hour = (monthly processing rate in tons/month)(1 month/hours of operation that month)(emission factor listed below)(1-control efficiency of 0.9985). Emission factor based on mass balance: EU9 = 4.89 lb/ton, EU14 = 3.56 lb/ton, EU16 = 4.89 lb/ton.
		The processing rate of each equipment shall not exceed 1.5 tons/ hour with control devices in use at all times of operation.
		See Monitoring Requirements for monitoring rates and visual inspection of controls. [401 KAR 59:010 Section 3(2)] Statistical basis: Three-hour average.
L-2	Visible Emissions	Each unit shall have Visible Emissions < 20 % opacity
		Compliance Demonstration:
		Refer to Recordkeeping (T-2) and Monitoring (T-5) requirements for this unit.
		Limitation. [401 KAR 59:010 Section 3(1)] Statistical basis: Six-minute average.

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### Narrative Requirements:

### **Applicable Regulations:**

Condition		
Applicable Regulations: New process operations is applicable to each affected facility associated with a process operation commenced after July 2, 1975 and limits particulate emissions. [401 KAR 59:010]		
Recordkeeping:		
Condition		

Recordkeeping: The permitee shall maintain records of the following: 1) monthly hours of operation and material processing rate; 2) the daily log of pressure drop readings of incoming and outgoing air for the dust collectors; 3) the monthly log of qualitative visual observation of opacity of emissions and the opacity determined by Reference Method 9, if any were taken, and repairs that were made due to any opacity reading which exceeded the standard. [401 KAR Chapter 52 Section 10]

#### **Monitoring:**

T-2

Condition No.	Condition
T-3	Monitoring: The permittee shall monitor the amount of material processed on a monthly basis. [401 KAR Chapter 52 Section 10]
T-4	Monitoring: The permittee shall monitor the hours of operation of the unit on a monthly basis. [401 KAR Chapter 52 Section 10]
T-5	Monitoring: The permittee shall perform a qualitative visible observation of the opacity of emissions from each stack on a monthly basis and maintain a log of the observation. If visible emission from a stack are seen, then the opacity shall be determined by EPA Reference Method 9 and an inspection shall be initiated for any necessary repairs. [401 KAR Chapter 52 Section 10]
T-6	Monitoring: The permitee shall monitor the pressure drop of incoming and outgoing air for the dust collectors on a daily basis. [401 KAR Chapter 52 Section 10]

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## GACT9 (05,06,22,23,32&35) Emission Unit 05 (STPP feeder bin for dish gel, BV-36) Emission Unit 06 (Soda ash 100 for dish gel, BV-37)

### Limitation Requirements:

Condition No.	Darramatar	Condition
110.	Parameter	Condition
L-1	PT (Particulate Matter)	Each unit shall have emissions of PT (Particulate Matter) <= 2.34 lbs/hr Compliance Demonstration:
		Compliance will be demonstrated from the following emission calculation basis and monitoring requirements:
		PT emission in pounds per hour = (monthly processing rate in tons/month)(1 month/hours of operation that month)(emission factor listed below)(1-control efficiency of 0.9985). Emission factor based on mass balance: EU5 = 216.7 lb/ton, EU6 = 260.6 lb/ton, EU22 = 26.7 lb/ton, EU23 = 2.67 lb/ton, EU32 = 26.7 lb/ton, EU35 = 559.2 lb/ton
		See Monitoring Requirements for monitoring rates and visual inspection of controls. [401 KAR 59:010 Section 3(2)] Statistical basis: Three-hour average.
L-2	Visible Emissions	Each unit shall have Visible Emissions < 20 % opacity
		Compliance Demonstration:
		Refer to Recordkeeping (T-2) and Monitoring (T-5) requirements for this unit.
		Limitation. [401 KAR 59:010 Section 3(1)] Statistical basis: Six-minute average.

### Narrative Requirements:

### **Applicable Regulations:**

Condition No.	Condition
T-1	Applicable Regulations: New process operations is applicable to each affected facility associated with a process operation commenced after July 2, 1975 and limits particulate emissions. [401 KAR 59:010]

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### Narrative Requirements:

### Recordkeeping:

Condition No.	Condition	
T-2	Recordkeeping: The permitee shall maintain records of the following: 1) monthly hours of operation and material processing rate; 2) the daily log of pressure drop readings of incoming and outgoing air for the dust collectors; 3) the monthly log of qualitative visual observation of opacity of emissions and the opacity determined by Reference Method 9, if any were taken, and repairs that were made due to any opacity reading which exceeded the standard. [401 KAR Chapter 52 Section 10]	
Monitoring:		
Condition No.	Condition	

Condition No.	Condition
T-3	Monitoring: The permittee shall monitor the amount of material processed on a monthly basis. [401 KAR Chapter 52 Section 10]
T-4	Monitoring: The permittee shall monitor the hours of operation of the unit on a monthly basis. [401 KAR Chapter 52 Section 10]
T-5	Monitoring: The permittee shall perform a qualitative visible observation of the opacity of emissions from each stack on a monthly basis and maintain a log of the observation. If visible emission from a stack are seen, then the opacity shall be determined by EPA Reference Method 9 and an inspection shall be initiated for any necessary repairs. [401 KAR Chapter 52 Section 10]
T-6	Monitoring: The permitee shall monitor the pressure drop of incoming and outgoing air for the dust collectors on a daily basis. [401 KAR Chapter 52 Section 10]